

**OFFICE OF ENVIRONMENTAL QUALITY CONTROL
BUREAU OF AIR QUALITY
PSD, NSPS (40CFR60), NESHAP (40CFR63) CONSTRUCTION PERMIT**

Santee Cooper (Pee Dee Generating Station)
2651 South Old River Road
Pamplico, SC 29583

Permission is hereby granted to install two (2) supercritical tangentially fired boilers, burning pulverized bituminous coal and petcoke (up to 30% by weight of coal/petcoke blend) in either boiler. The boilers can fire ultra low sulfur fuel oil containing 0.0015% sulfur or less (or No. 2 fuel oil if ultra low sulfur fuel oil is not commercially available) or natural gas during startup and load shift to a maximum rate of 1656 million Btu/hr. Each boiler (B01 and B02) will supply steam to a single steam turbine/generator set. The new boilers are each rated at 5,700 million Btu/hr maximum heat input capacity with an output of 660 MW each. These boilers will be equipped with Low NO_x burners (LNBs), two-level separated overfire air, Selective Catalytic Reduction systems (SCRs), Flue Gas Desulfurization (FGDs) (wet limestone scrubbers), and Fabric Filter Baghouses for control of NO_x, SO₂, and PM/PM₁₀ emissions, respectively. These boilers will be subject to 40CFR60, Subparts A and Da, NO_x Budget Plan, CAIR, CAMR, Case-by-Case MACT and Acid Rain requirements. Boilers B01 and B02 will be identified as emission units ID01 and ID02, respectively.

A coal handling system consisting of shaker railcar unloader, conveyors, storage pile, crusher tower, transfer tower, coal bunkers (6 silos and one central dust collector in each of the two sets) will be installed. This coal handling system will be subject to 40CFR60, Subparts A and Y. Petroleum coke will be delivered by rail or truck and stored separately from coal for subsequent blending with coal. The coal and petcoke handling systems will be identified as emission units ID03 (Coal), ID04 (Petcoke), and ID05 (Coal/Petcoke Crusher).

An ash handling system for each boiler will also be installed. Fly ash will be collected and loaded out through two fly ash silos. Bottom ash will be mixed with water and piped to an ash pond. The ash sludge may be dewatered for sale. The ash handling system will be identified as emission units ID09 (Fly Ash) and ID10 (Bottom Ash).

Two emergency generators (D01 and D02) rated at 1,500 KW each fired on ultra low sulfur fuel oil containing 0.0015% sulfur or less (or No. 2 fuel oil with 0.05% sulfur or less if ultra low sulfur fuel oil is not commercially available) will be provided for backup power. A 425 HP fire pump will be provided for fire protection. These units are exempt from construction permit requirements but the emergency generators will be subject to 40CFR60, Subparts A and IIII as well as 40 CFR 63, Subparts A and ZZZZ, and the fire pump will be subject to 40 CFR 60 Subparts A and IIII.

A limestone handling system will also be installed consisting of material transport, truck unloading, storage pile, conveyors, crusher, and silos. Portions of the limestone handling will be subject to 40CFR60, Subparts A and OOO. The limestone handling system will be identified as emission units ID06 (Limestone Handling) and ID07 (Limestone Crusher).

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A gypsum handling system will also be installed consisting of dewatering, conveyors to drops, storage piles, and truck loading. The gypsum conveyors will be subject to 40CFR60, Subparts A and OOO. The gypsum handling system will be identified as emission unit ID08.

A cooling tower system will also be installed consisting of two multi-cell towers. Each tower will have a nominal circulation rate of 287,100 gallons per minute with up to eight circulating water concentrations. The cooling tower system will be identified as emission unit ID11.

Several storage tanks will be installed for storing fuel oil, gasoline, diesel fuel, lube oil, anhydrous ammonia, turbine lube oil, sulfuric acid, sodium hydroxide, sodium hypochlorite, and organic acid. All storage tanks will be categorized as insignificant activities.

These processes will all be subject to SC Regulation 62.5, Standard No. 7 – “Prevention of Significant Deterioration” (PSD), as well as other state regulations described in the Special Conditions section of this permit.

NOTWITHSTANDING ANY OF THE CONDITIONS LISTED BELOW, NO APPLICABLE LAW, REGULATION, OR STANDARD MAY BE VIOLATED.

CONDITIONS

1. All official correspondence, plans, permit application forms, and written statements are an integral part of this permit.
2. The owner/operator shall submit written notification to the Director of the Engineering Services Division of the date construction is commenced, postmarked no later than 30 days after such date, and written notification of the actual date of initial startup of each new or altered source, postmarked within 15 days after such date.
3. Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time frame. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. This request must be made prior to the permit expiration.
4. The owner or operator shall comply with all terms, conditions, and limitations of this permit.

This is pursuant to the provisions of Section 48-1-110, 1976 *Code of Laws of South Carolina*, as amended, and the *South Carolina Air Quality Control Regulation 61-62.1*, Section II and the *Code of Federal Regulations*, Title 40, Parts 60 (Subpart A), and 63 (Subpart A).

I. STANDARD CONDITIONS

- A. This permit expressly incorporates all the provisions of *South Carolina Department of Health and Environmental Control Regulation 61-62.1*, Section II, Paragraph J and the *Code of Federal Regulations*, Title 40, Parts 60 (Subpart A), and 63 (Subpart A).

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II. SPECIAL CONDITIONS

A. EMISSION LIMITATIONS

Air pollutant emissions shall not exceed the following:

Unit ID	Equip ID	Desc.	Pollutant/ Standard	Limit	Reference Method	Regulation	State Only
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	Opacity	20%, each	9	SC Regulation 61-62.5, Std. No. 1 40 CFR 60, Subpart Da	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	PM (filterable)	Lesser of 0.6 lb/10 ⁶ Btu or 57.84 P ^{-0.637} where P = heat input rate (each) (3-hr avg)	5, 5B or 17	SC Regulation 61-62.5, Std. No. 1	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	PM (filterable)	0.015 lb/10 ⁶ Btu or 0.14 lb/MWh gross energy output, each (alternate limit 0.03 lb/10 ⁶ Btu and 99.9% reduction efficiency)	5, 5B or 17	40 CFR 60, Subpart Da	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	PM (filterable)	0.015 lb/10 ⁶ Btu, each (3-hr avg) [30-day rolling average]	5, 5B or 17 [CEMS]	SC Regulation 61-62.5, Std. No. 7	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	PM (total)	0.018 lb/10 ⁶ Btu, each (3-hr avg)	5, 5B or 17 and 202	SC Regulation 61-62.5, Std. No. 7	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	PM ₁₀ (filterable)	0.012 lb/10 ⁶ Btu, each (3-hr avg)	201	SC Regulation 61-62.5, Std. No. 7	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	PM ₁₀ (total)	0.018 lb/10 ⁶ Btu, each (3-hr avg)	201, 202	SC Regulation 61-62.5, Std. No. 7	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	PM ₁₀ (filterable)	0.012 lb/10 ⁶ Btu, each (3-hr avg and 30-day rolling avg)	As Approved by the Bureau, and CEMS	40 CFR 63.43(g), SC Regulation 61-62.63.43(g)(1)	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	Filterable PM	1.36 tons/day, each; 2.05 tons/day, combined (24-hr block sums)	5, 5B or 17	SC Reg 61-62.1, Section II(J)(2)	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	Total PM	1.64 tons/day, each; 2.46 tons/day, combined (24-hr block sums)	5, 5B or 17 and 202	SC Reg 61-62.1, Section II(J)(2)	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	PM ₁₀ (filterable)	1.09 tons/day, each; 1.64 tons/day, total (24-hr block sums)	201	SC Reg 61-62.1, Section II(J)(2)	No

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01, 02	B01, B02	Boiler No. 1, Boiler No. 2	PM ₁₀ (total)	1.64 tons/day, each; 2.46 tons/day, combined (24-hr block sums)	201, 202	SC Reg 61-62.1, Section II(J)(2)	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	SO ₂	3.5 lb/10 ⁶ Btu, each (24-hr block avg)	6 or 6C	SC Regulation 61-62.5, Std. No. 1	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	SO ₂	1.4 lb/MWh gross energy output, or 95% reduction, each (30-day rolling avg.)	6 or 6C	40 CFR 60, Subpart Da	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	SO ₂	0.12 lb/10 ⁶ Btu, each (30-day rolling avg)	CEMS	SC Regulation 61-62.5, Std. No. 7	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	SO ₂ (as surrogate for acid gas HAPs)	0.12 lb/10 ⁶ Btu, each (3-hr avg and 30-day rolling avg)	As Approved by the Bureau and CEMS	40 CFR 63.43(g), SC Regulation 61-62.63.43(g)(1)	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	SO ₂	10.92 tons/day, each; 16.42 tons/day, combined (24-hr block sums)	CEMS	SC Reg 61-62.1, Section II(J)(2)	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	NO _x	1.0 lb/MWh or 0.6 lb/10 ⁶ Btu and 65% reduction, each (30-day rolling avg.)	7 or 7E	40 CFR 60, Subpart Da	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	NO _x	0.07 lb/10 ⁶ Btu, each (30-day rolling avg)	7 or 7E	SC Regulation 61-62.5, Std. No. 7	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	NO _x	6.37 tons/day, each; 9.58 tons/day, combined (24-hr block sums)	CEMS	SC Reg 61-62.1, Section II(J)(2)	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	CO	0.15 lb/10 ⁶ Btu, each (3-hr avg) [30-day avg]	10 [CEMS]	SC Regulation 61-62.5, Std. No. 7	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	CO (as surrogate for organic HAPs)	0.15 lb/10 ⁶ Btu, each (3-hr avg and 30-day rolling avg)	As Approved by the Bureau and CEMS	40 CFR 63.43(g), SC Regulation 61-62.63.43(g)(1)	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	CO	13.65 tons/day, each; 20.52 tons/day, combined (24-hr block sums)	10	SC Reg 61-62.1, Section II(J)(2)	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	VOC	0.0024 lb/10 ⁶ Btu, each (3-hr block avg)	18, 25 or 25A	SC Regulation 61-62.5, Std. No. 5.1	Yes

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01, 02	B01, B02	Boiler No. 1, Boiler No. 2	VOC	0.0024 lb/10 ⁶ Btu, each (3-hr block avg)	18, 25 or 25A	SC Regulation 61-62.5, Std. No. 7	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	VOC	0.22 tons/day, each; 0.33 tons/day, combined (24-hr block sums)	18, 25 or 25A	SC Reg 61-62.1, Section II(J)(2)	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	Lead	1.91 E-05 lb/10 ⁶ Btu, each	29	SC Regulation 61-62.5, Std. No. 7	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	Lead	0.0017 tons/day, each; 0.0026 tons/day, combined (24-hr block sums)	29	SC Reg 61-62.1, Section II(J)(2)	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	H ₂ SO ₄	0.005 lb/10 ⁶ Btu, each	8	SC Regulation 61-62.5, Std. No. 7	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	H ₂ SO ₄	0.455 tons/day, each; 0.684 tons/day, combined (24-hr block sums)	8	SC Reg 61-62.1, Section II(J)(2)	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	Fluorides	3.41 E-04 lb/10 ⁶ Btu, each	13	SC Regulation 61-62.5, Std. No. 7	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	Fluorides	0.031 tons/day, each; 0.047 tons/day, combined (24-hr block sums)	13	SC Reg 61-62.1, Section II(J)(2)	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	Mercury	20 x 10 ⁻⁶ lb/MWh, each (12-month rolling avg.)	29, CEMS	SC Reg 61-62.60 Subpart Da	Yes
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	Mercury	8.0 x 10 ⁻⁶ lb/MWh (12-month rolling average); 46.3 lb/yr (12-month rolling sum)	As Approved by the Bureau and CEMS	40 CFR 63.43(g), SC Regulation 61-62.63.43(g)(1)	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	SO ₂ , NO _x	See Acid Rain Permit	N/A	40 CFR 72, 73, 75, and 76	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	PM	All filterable PM/PM ₁₀ limits	N/A	40 CFR 64	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	SO ₂ , NO _x	All SO ₂ and NO _x limits	CEMS	40 CFR 64 Avoidance	No

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01, 02	B01, B02	Boiler No. 1, Boiler No. 2	SO ₂ , NO _x	See Regulation	CEMS	CAIR	No
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	Mercury	See Regulation	CEMS	CAMR	Yes
01, 02	B01, B02	Boiler No. 1, Boiler No. 2	PM, PM ₁₀ , SO ₂ , NO _x , CO, VOC, Pb, H ₂ SO ₄ , Fluorides	Comply with Startup and Shutdown Requirements	N/A	SC Regulation 61-62.5, Standard No. 7	No
03	MT10 MT11 MT12	See Att. B	Opacity	20%, each	9	40 CFR 60, Subpart Y	No
03	Each	See Att. B	Opacity	20%, each	9	SC Regulation 61-62.5, Std. No. 4	No
03	Combined	See Att. B	PM	76.23 lb/hr, combined	5	SC Regulation 61-62.5, Std. No. 4	No
03	Combined	See Att. B	PM	6.57 lb/hr, combined	5	SC Regulation 61-62.5, Std. No. 7	No
04	Each	See Att. B	Opacity	20%, each	9	SC Regulation 61-62.5, Std. No. 4	No
04	Combined	See Att. B	PM	76.23 lb/hr, combined	5	SC Regulation 61-62.5, Std. No. 4	No
04	Combined	See Att. B	PM	2.51 lb/hr, combined	5	SC Regulation 61-62.5, Std. No. 7	No
05	CR01	See Att. B	Opacity	20%	9	SC Std. 4	No
05	CR01	See Att. B	Opacity	20%	9	40CFR60 Subpart Y	No
05	CR01	See Att. B	PM	76.23 lb/hr	9	SC Std. 4	No
05	CR01	See Att. B	PM	0.59 lb/hr	5	SC Std. 7	No
06	Each	See Att. B	Opacity	20%, each	9	SC Regulation 61-62.5, Std. No. 4	No
06	MT23 MT24 MT25 MT28 MT29 MT30	See Att. B	Opacity	7%, each (point sources)	9	40CFR60 Subpart OOO	No
06	MT20 MT21 MT22 MT26 MT27	See Att. B	Opacity	10%, each (fugitive sources)	9	40CFR60 Subpart OOO	No
06	Combined	See Att. B	PM	53.55 lb/hr, combined	5	SC Regulation 61-62.5, Std. No. 4	No
06	Combined	See Att. B	PM	0.84 lb/hr, combined	5	SC Regulation 61-62.5, Std. No. 7	No

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06	MT23 MT24 MT25 MT28 MT29 MT30	See Att. B	PM	0.022 grains/dscf, each (point sources)	5	40CFR60 Subpart OOO	No
07	CR02	See Att. B	Opacity	20%	9	SC Regulation 61-62.5, Std. No. 4	No
07	CR02	See Att. B	Opacity	7%	9	40CFR60 Subpart OOO	No
07	CR02	See Att. B	PM	53.55 lb/hr	5	SC Regulation 61-62.5, Std. No. 4	No
07	CR02	See Att. B	PM	0.05 lb/hr	5	SC Regulation 61-62.5, Std. No. 7	No
07	CR02	See Att. B	PM	0.022 grains/dscf	5	40CFR60 Subpart OOO	No
08	Each	See Att. B	Opacity	20%, each	9	SC Regulation 61-62.5, Std. No. 4	No
08	MT34 MT35 MT36	See Att. B	Opacity	10%, each (fugitive sources)	9	40 CFR 60, Subpart OOO	No
08	Combined	See Att. B	PM	60.50 lb/hr, combined	5	SC Regulation 61-62.5, Std. No. 4	No
08	Combined	See Att. B	PM	1.30 lb/hr, combined	5	SC Regulation 61-62.5, Std. No. 7	No
09	Each	See Att. B	Opacity	20%	9	SC Regulation 61-62.5, Std. No. 4	No
09	Combined	See Att. B	PM	63.00 lb/hr, combined	5	SC Regulation 61-62.5, Std. No. 4	No
09	Combined	See Att. B	PM	0.045 lb/hr, combined	5	SC Regulation 61-62.5, Std. No. 7	No
10	Each	See Att. B	Opacity	20%, each	9	SC Regulation 61-62.5, Std. No. 4	No
11	Each	Cooling Towers	Opacity	20%, each	9	SC Regulation 61-62.5, Std. No. 4	No
11	Each	Cooling Towers	PM	83.8 lb/hr (each tower)	N/A	SC Regulation 61-62.5, Std. No. 4	No
11	Each	Cooling Towers	PM	0.0005% drift loss and 0.466 lb/hr (each tower)	N/A	SC Regulation 61-62.5, Std. No. 7	No

N/A = Not Applicable

The emission limitations listed for each emission unit are based on operation at permitted capacity. Operation at less than permitted capacity must meet emission limits specified in the applicable regulations based on that operating rate. All test methods must be the most recent revisions that are published in the *Code of Federal Regulations*, in accordance with the requirements of SC Regulation 61-62.1, Section IV, Source Test.

B. CONTINUOUS MONITORING REQUIREMENTS

ID	Pollutant	Averaging Time
Boilers 01 and 02	Opacity	6 minute block average

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ID	Pollutant	Averaging Time
Boilers 01 and 02	PM	30-day rolling average
Boilers 01 and 02	SO ₂	24-hour block average 30-day rolling average
Boilers 01 and 02	NO _x	24-hour block average 30-day rolling average
Boilers 01 and 02	Mercury	12-month rolling average 12-month rolling sum
Boilers 01 and 02	CO	30-day rolling average

C. SOURCE TEST SCHEDULE

ID	Pollutant	Frequency	Method	Averaging Time
Boilers 01 and 02	Opacity	Initial and Annual (See Note 1)	9	6 minutes
Boilers 01 and 02	PM	Initial and Annual (See Note 1)	5, 5B or 17	Minimum of (3) one hour runs
Boilers 01 and 02	PM ₁₀	Initial	201 and 202	Minimum of (3) one hour runs
Boilers 01 and 02	SO ₂	Initial	19 and CEMS	30 days
Boilers 01 and 02	NO _x	Initial	19 and CEMS	30 days
Boilers 01 and 02	CO	Initial and Annual (See Note 1)	10	Minimum of (3) one hour runs
Boilers 01 and 02	VOC	Initial	18, 25 or 25A	Minimum of (3) one hour runs
Boilers 01 and 02	H ₂ SO ₄	Initial	8	Minimum of (3) one hour runs
Boilers 01 and 02	Lead	Initial	29	Minimum of (3) one hour runs
Boilers 01 and 02	Hydrogen Chloride	Initial and Annual	As Approved by the Bureau	Minimum of (3) one hour runs
Boilers 01 and 02	Hydrogen Fluoride	Initial and Annual	As Approved by the Bureau	Minimum of (3) one hour runs
Boilers 01 and 02	Mercury	Initial	29 (initial) CEMS (annual)	Minimum of (3) one hour runs
Material Handling Sources (See Note 2)	PM	Initial	5, 5B, 17	Minimum of (3) one hour runs
MT20, MT21, MT22, MT23, MT24, MT25, MT26, MT27, MT28, MT29, MT30, MT34, MT35, MT36, CR01	Opacity	Initial	As Specified in 40CFR60.675	As Specified in 40CFR60.675
MT23, MT24, MT25, MT28, MT29, MT30, CR01	PM	Initial	As Specified in 40CFR60.675	As Specified in 40CFR60.675

Note 1: PM testing frequency may be more frequent than annual depending on test results. On-going PM and CO tests may be waived by the Department as specified in Condition 14.

Note 2: Initial source testing shall be conducted for each type baghouse or water mist dust eliminator used for highest emitting sources. Proposed sources to be tested shall be submitted to the Bureau for review and approval prior to testing.

D. ADDITIONAL CONDITIONS

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1	(Facility-wide) The permittee shall pay fees in accordance with SC Regulation 61-30, SC Environmental Protection Fees.
2	(Facility-wide) In accordance with SC Regulation 61-62.1 Section II(J), for all sources not required to have continuous emissions monitors, in the event of any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the local Environmental Quality Control (EQC) Regional office within twenty-four (24) hours after the beginning of the occurrence. The permittee shall also submit a written report within thirty (30) days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality (BAQ). The report shall contain as a minimum, the following: the identity of the emission unit and associated equipment where excess emissions occurred, the magnitude of excess emissions, the time and duration of excess emissions, the steps taken to remedy the malfunction and to prevent a recurrence, documentation that control equipment and processes were at all times maintained and operated, to the maximum extent practicable, in a manner that was consistent with good practice for minimizing emissions. Such a report shall in no way serve to excuse, otherwise justify, or in any manner affect any potential liability or enforcement action resulting from the occurrence.
3	<p>(Facility-wide) Air dispersion modeling (or other method) has demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air standard. Any changes in the parameters used in the air dispersion modeling may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment A of this permit. Higher emission rates may be administratively incorporated into Attachment A of this permit provided a demonstration using these higher emission rates shows the attainment and maintenance of any state or federal ambient air quality standard or with any other applicable requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are exceeded.</p> <p>The owner/operator shall maintain this facility at or below the emission rates as listed in Attachment A, not to exceed the pollutant limitations of this construction permit. Should the facility wish to increase the emission rates listed in Attachment A, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified in this permit condition. This is a State Only enforceable requirement.</p>
4	(Facility-wide) These conditions shall not supersede any State or Federal requirements such as National Emission Standards for Hazardous Air Pollutants, unless these conditions would impose a more restrictive limit.
5	(Facility-wide) This construction permit was reviewed and issued based on the permit application submitted by the owner/operator. The owner/operator shall obtain any Bureau authorization required under South Carolina Regulation 61-62.1, Section II(A) prior to making modifications not covered under this construction permit.
6	For sources not yet covered by an effective Title V operating permit, the owner or operator shall submit a written request to the Director of the Engineering Services Division for a new operating permit to cover any new, or altered source, postmarked no later than fifteen (15) days after the actual date of initial startup of each new or altered source. In accordance with SC Regulation 61-62.70.5(a), the owner or operator shall submit a timely and complete Part 70 permit application within 12 months of start up.

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7	The owner/operator or professional engineer in charge of the project shall certify that, to the best of his/her knowledge and belief and as a result of periodic observation during construction, the construction under application has been completed in accordance with the specifications agreed upon in the construction permit issued by the Department. If construction is certified as provided above, the permittee may operate the source in compliance with the terms and conditions of the construction permit until the operating permit is issued by the Department. If construction is not built as specified in the permit application and associated construction permit(s), the owner/operator must submit to the Director of the Engineering Services Division a complete description of modifications that are at variance with the documentation of the construction permitting determination prior to commencing operation. Construction variances that would trigger additional requirements that have not been addressed prior to start of operation shall be considered construction without a permit.																														
8	This facility is a “major source” as defined by SC DHEC Regulation 61-62.70.2(r) (Title V), based on potential emissions of PM ₁₀ , SO ₂ , NO _x , CO, VOC and HAP. This facility is required to submit a Title V application within 12 months from the date of start-up.																														
9	(Facility-wide) Unless elsewhere specified within this permit, all records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of at least five (5) years from the date generated and shall be made available to a Department representative upon request.																														
10	(Facility-wide) Unless elsewhere specified within this permit, all reports required under this permit including all recorded parameters and calculated values shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality, at the address listed below, postmarked no later than thirty (30) calendar days after the end of the reporting period. SC DHEC - BAQ Technical Management Section 2600 Bull Street Columbia, SC 29201																														
11	(Boilers B01 and B02) These sources are subject to all provisions of SC Regulation 61-62.5, Standard No. 7, “Prevention of Significant Deterioration” for PM, PM ₁₀ , SO ₂ , NO _x , CO, VOC, lead, sulfuric acid, and fluorides.																														
12	(Boilers B01 and B02) The Best Available Control Technology (BACT) for Boilers No. 1 and No. 2 was determined to be the following: <table><tr><th>Pollutant</th><th>BACT</th><th>Limit</th></tr><tr><td>PM</td><td>Use of fabric filter baghouse</td><td>0.018 lb/million Btu, each (total PM, 3-hr avg) 0.015 lb/million Btu, each (filterable PM, 3-hr avg)</td></tr><tr><td>PM₁₀</td><td>Use of fabric filter baghouse</td><td>0.018 lb/million Btu, each (total PM₁₀, 3-hr avg) 0.012 lb/million Btu, each (filterable PM₁₀, 3-hr avg)</td></tr><tr><td>SO₂</td><td>Use of FGD</td><td>0.12 lb/million Btu, each (30-day avg)</td></tr><tr><td>NO_x</td><td>Use of SCR</td><td>0.07 lb/million Btu, each (30-day avg)</td></tr><tr><td>CO</td><td>Good combustion practices</td><td>0.15 lb/million Btu, each (30-day avg)</td></tr><tr><td>VOC</td><td>Good combustion practices</td><td>0.0024 lb/million Btu, each (3-hr avg)</td></tr><tr><td>Lead</td><td>Use of fabric filter baghouse</td><td>0.0000191 lb/million Btu, each (3-hr avg)</td></tr><tr><td>Fluorides</td><td>Use of FGD</td><td>3.41 x 10⁻⁴ lb/million Btu, each (3-hr avg) (95% scrubbing efficiency)</td></tr><tr><td>H₂SO₄</td><td>Use of FGD</td><td>0.005 lb/10⁶ Btu, each (3-hr avg)</td></tr></table>	Pollutant	BACT	Limit	PM	Use of fabric filter baghouse	0.018 lb/million Btu, each (total PM, 3-hr avg) 0.015 lb/million Btu, each (filterable PM, 3-hr avg)	PM ₁₀	Use of fabric filter baghouse	0.018 lb/million Btu, each (total PM ₁₀ , 3-hr avg) 0.012 lb/million Btu, each (filterable PM ₁₀ , 3-hr avg)	SO ₂	Use of FGD	0.12 lb/million Btu, each (30-day avg)	NO _x	Use of SCR	0.07 lb/million Btu, each (30-day avg)	CO	Good combustion practices	0.15 lb/million Btu, each (30-day avg)	VOC	Good combustion practices	0.0024 lb/million Btu, each (3-hr avg)	Lead	Use of fabric filter baghouse	0.0000191 lb/million Btu, each (3-hr avg)	Fluorides	Use of FGD	3.41 x 10 ⁻⁴ lb/million Btu, each (3-hr avg) (95% scrubbing efficiency)	H ₂ SO ₄	Use of FGD	0.005 lb/10 ⁶ Btu, each (3-hr avg)
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	<p>In addition, fuels shall be limited to use of ultra low sulfur fuel oil containing 0.0015% sulfur or less (No. 2 fuel oil containing 0.05% sulfur or less may be used if ultra low sulfur fuel oil is not commercially available) or natural gas during startup, shutdown, and flame stabilization and use of eastern bituminous coal blended with up to 30% petcoke during normal operation. During startup and shutdown, each boiler shall not exceed the following limits:</p> <table><tr><th>Pollutant</th><th>BACT</th><th>Limit (total pounds for “C” hours)</th></tr><tr><td>PM</td><td>Use of fabric filter baghouse as established by startup and shutdown plan</td><td>C * 102.6 lb/hr, each (total PM) C * 85.5 lb/hr, each (filterable PM)</td></tr><tr><td>PM₁₀</td><td>Use of fabric filter baghouse as established by startup and shutdown plan</td><td>C * 102.6 lb/hr, each (total PM₁₀) C * 68.4 lb/hr, each (filterable PM₁₀)</td></tr><tr><td>SO₂</td><td>Use of FGD as established by startup and shutdown plan</td><td>C * 684 lb/hr, each</td></tr><tr><td>NO_x</td><td>Follow startup and shutdown plan</td><td>C * 399 lb/hr, each</td></tr><tr><td>CO</td><td>Good combustion practices</td><td>C * 855 lb/hr, each</td></tr><tr><td>VOC</td><td>Good combustion practices</td><td>C * 13.68 lb/hr, each</td></tr><tr><td>Lead</td><td>Use of fabric filter baghouse as established by startup and shutdown plan</td><td>C * 0.11 lb/hr, each</td></tr><tr><td>Fluorides</td><td>Use of FGD as established by startup and shutdown plan</td><td>C * 1.94 lb/hr, each</td></tr><tr><td>H₂SO₄</td><td>Use of FGD as established by startup and shutdown plan</td><td>C * 28.5 lb/hr, each</td></tr></table> <p>where C = duration in hours of individual startup or shutdown periods</p> <p>The pollution control systems shall be brought into service during startup, consistent with the technical limitations, manufacturers’ specifications, and good engineering and maintenance practices. The fabric filter baghouse and FGD systems shall achieve substantial control upon introduction of coal into the boilers, and optimum performance upon the unit reaching steady load conditions. The SCR system shall be brought into service upon the unit reaching minimum load levels that correspond to specific flue gas temperatures necessary for operating the SCR system, as specified by the manufacturer. The startup period shall end once the SCR system is brought into service. No specific operating procedures will apply during periods of shutdown since emissions are not expected to fluctuate significantly and will essentially cease upon elimination of fuel in the boilers.</p>	Pollutant	BACT	Limit (total pounds for “C” hours)	PM	Use of fabric filter baghouse as established by startup and shutdown plan	C * 102.6 lb/hr, each (total PM) C * 85.5 lb/hr, each (filterable PM)	PM ₁₀	Use of fabric filter baghouse as established by startup and shutdown plan	C * 102.6 lb/hr, each (total PM ₁₀) C * 68.4 lb/hr, each (filterable PM ₁₀)	SO ₂	Use of FGD as established by startup and shutdown plan	C * 684 lb/hr, each	NO _x	Follow startup and shutdown plan	C * 399 lb/hr, each	CO	Good combustion practices	C * 855 lb/hr, each	VOC	Good combustion practices	C * 13.68 lb/hr, each	Lead	Use of fabric filter baghouse as established by startup and shutdown plan	C * 0.11 lb/hr, each	Fluorides	Use of FGD as established by startup and shutdown plan	C * 1.94 lb/hr, each	H ₂ SO ₄	Use of FGD as established by startup and shutdown plan	C * 28.5 lb/hr, each
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13	<p>(Boilers B01 and B02) The owner/operator shall establish a startup/shutdown/malfunction plan including but not limited to, specifying the expected duration of normal startups and shutdowns, the expected intervals of time (or load) for which control devices are not expected to be on line (per manufacturer or other requirements), and operational conditions that are expected to be followed that minimize emissions. Also, included in this plan the owner/operator shall establish how operation of the boilers at low utilization will be minimized. This plan shall be submitted for approval to the Bureau's Engineering Services Division prior to operation of either Boiler No. 1 or No. 2. This plan shall be reviewed and updated on a minimum of an annual frequency and any changes shall be submitted to the Engineering Services Division within 30 days of the operating permit effective date anniversary. If there are no changes, the report shall indicate such. Failure of the facility to comply with the plan will represent a violation.</p> <p>Mass emissions of pollutants as described in Condition 12 occurring during the startup/shutdown periods shall not exceed the specified limits.</p> <p>The facility shall record emissions during startups, shutdowns, and malfunctions and shall report quarterly any instances for which actual emissions exceed the above specified rates, any instances for which any startup or shutdown exceeds the expected time (or load) parameters, and any instances where control devices are not operational as expected during startup and shutdown. This report shall also include explanations where such instances occur. If no instances occur during the reporting quarter, then the report shall indicate such.</p>
14	<p>(Boilers B01 and B02) Source tests for opacity, PM, PM₁₀, SO₂, NO_x, CO, VOC, H₂SO₄, lead, mercury, HCl and HF emissions from Boilers No. 1 and No. 2 will be required prior to the issuance of a permit to operate. The tests shall be performed within 60 days after achieving maximum production but not later than 180 days after initial start-up. The Bureau must be notified at least two weeks prior to a source test so that a Bureau representative may be present. Source test methodology, to include testing at worst-case conditions for Standard 7 and representative conditions for MACT, must be approved by the Bureau and comply with SC DHEC Regulation 61-62.1, Section IV - Source Testing.</p> <p>Ongoing source tests for CO and PM may be waived by the Department if the CO and PM CEMS data are submitted by the facility and show consistent compliance with the respective limits.</p>
15	<p>(Material Handling Systems) Source tests for PM from representative sources will be required prior to the issuance of a permit to operate. The representative sources shall consist of testing each type of baghouse or water mist dust eliminator for the highest emitting source of that type. The representative sources would likely include, but not be limited to, the baghouse or water mist dust eliminator for one coal bunker (six silos), baghouse or water mist dust eliminator for the coal crusher, and another representative baghouse or water mist dust eliminator. The proposed list of sources to be tested shall be submitted to the Bureau for approval as part of the test protocol. The tests shall be performed within 60 days after achieving maximum production but not later than 180 days after initial start-up. The Bureau must be notified at least two weeks prior to a source test so that a Bureau representative may be present. Source test methodology, to include testing at worst-case conditions, must be approved by the Bureau and comply with SC DHEC Regulation 61-62.1, Section IV - Source Testing.</p>
16	<p>(Boilers B01 and B02) Notification of intent to source test, performance of source tests, and the reporting of source test results shall comply with 40 CFR 60.8, New Source Performance Standards (NSPS), and with South Carolina Regulation 61-62.1, Section IV, Source Tests.</p>

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17	(Boilers B01 and B02) This source is permitted to operate two supercritical pulverized coal-fired boilers, each rated at a heat input rate of 5,700 million Btu/hr. These units are permitted to burn eastern bituminous coal, or eastern bituminous coal with petcoke blended up to 30% by composite weight (i.e., 30% petcoke and 70% coal) as fuel. Ultra low sulfur fuel oil (or fuel oil No. 2 containing 0.05% or less sulfur if ultra low sulfur fuel oil is not commercially available) and natural gas may be used for initial firing of each boiler during startup in addition to periods requiring flame stabilization. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality. During operation of these units, all control devices (including fabric filter baghouses, FGD Scrubbers, Low NO _x Burners, and SCR controls) shall be operated consistent with the technological limitations, manufacturer's specifications, and good engineering and maintenance practices for the control devices.
18	(Boilers B01 and B02) The owner/operator shall maintain on file all measurements including continuous monitoring system or monitoring device performance measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required in a permanent form.
19	(Boilers B01 and B02) The owner/operator shall install, operate, and maintain continuous opacity monitoring system (COMS) for monitoring and reporting of opacity and continuous emissions monitor systems (CEMS) for monitoring and reporting of emissions of PM, NO _x , SO ₂ , CO, and mercury.
20	(Boilers B01 and B02) These units are subject to all applicable requirements of 40CFR60 Subparts A and Da, New Source Performance Standards for Electric Utility Steam Generating Plants, as revised June 9, 2006.
21	<p>(Boilers B01 and B02) 40CFR60.42Da(c) On and after the date on which the performance test required to be conducted under 40CFR60.8 is completed, no owner or operator subject to the provisions of 40CFR60 Subpart Da shall cause to be discharged into the atmosphere from any affected facility any gases that contain particulate matter in excess of either:</p> <p>(a) 0.14 lb/MWh gross energy output; or</p> <p>(b) 0.015 lb/MMBtu heat input derived from the combustion of solid, liquid, or gaseous fuel.</p> <p>As an alternative to meeting the requirements above, the owner or operator may elect to meet the requirements as follows. On and after the date on which the performance test required to be conducted under 40CFR60.8 is completed, the owner or operator subject to the provisions of 40CFR60 Subpart Da shall not cause to be discharged into the atmosphere from any affected facility any gases that contain particulate matter in excess of:</p> <p>(a) 0.03 lb/MMBtu heat input, and</p> <p>(b) 99.9 percent reduction.</p>
22	<p>(Boiler B01 and BoilerB02) 40CFR60.43Da(i) On and after the date on which the performance test required to be conducted under 40CFR60.8 is completed, no owner or operator subject to the provisions of 40CFR60 Subpart Da shall cause to be discharged into the atmosphere from any affected facility any gases that contain sulfur dioxide in excess of either:</p> <p>(a) 1.4 lb/MWh gross energy output on a 30-day rolling average basis, or</p> <p>(b) 5 percent of the potential combustion concentration (95 percent reduction) on a 30-day rolling average basis.</p>
23	(Boilers B01 and B02) 40CFR60.44Da(e) On and after the date on which the performance test required to be conducted under 40CFR60.8 is completed, no owner or operator subject to the provisions of 40CFR60 Subpart Da shall cause to be discharged into the atmosphere from any affected facility, any gases that contain nitrogen oxides (expressed as NO ₂) in excess of 1.0 lb/MWh gross energy output on a 30-day rolling average basis.

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24	<p>(Boilers B01 and B02) This is a state-only standard. These requirements will be met until this state regulation is repealed.</p> <p>SC Reg 61-62.60.44Da(e) On and after the date on which the performance test required to be conducted under 40CFR60.8 is completed, no owner or operator subject to the provisions of SC Reg 61-62.60 Subpart Da that burns only bituminous coal, shall cause to be discharged into the atmosphere from any new affected source, any gases that contain mercury in excess of 20.0×10^{-6} lb/MWh (0.02 lb/gigawatt-hr) on an output basis averaged on a 12-month rolling average basis.</p>
25	<p>(Boilers B01 and B02) In accordance with SC Regulation 61-62.5, Standard No. 1, Emissions from Fuel Burning Operations and 40CFR60.42Da(b), Standards Of Performance For Electric Utility Steam Generating Units For Which Construction Is Commenced After September 18, 1978, these boilers shall not discharge into the ambient air smoke which exceeds an opacity of 20%. The twenty percent (20%) opacity limit may be exceeded for soot blowing only, where so equipped, but may not be exceeded for more than six (6) minutes in a one hour period nor be exceeded for more than a total of four 6-minute periods in a twenty-four (24) hour period, of not more than 27% opacity. This opacity standard applies at all times except during periods of startup and shutdown.</p> <p>The owner/operator shall, to the extent practicable, maintain and operate any source including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. For the opacity standards set forth above to not apply during startup or shutdown the owner/operator shall maintain a log of the time, magnitude, duration and any other pertinent information to determine periods of startup and shutdown.</p>
26	<p>(Boilers B01 and B02) 40CFR 60.49Da(a) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the opacity of emissions discharged to the atmosphere, except where gaseous fuel is the only fuel combusted. If opacity interference due to water droplets exists in the stack (for example, from the use of an FGD system), the opacity is monitored upstream of the interference (at the inlet to the FGD system). If opacity interference is experienced at all locations (both at the inlet and outlet of the sulfur dioxide control system), alternate parameters indicative of the particulate matter control system's performance are monitored (subject to the approval of the Department and EPA).</p>
27	<p>(Boilers B01 and B02) 40CFR60.48Da(e) After the initial performance test required under 40CFR60.8 compliance with the sulfur dioxide emission limitations and percentage reduction requirements under 40CFR60.23a and the nitrogen oxides emission limitations under 40CFR60.22a is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30-day average emission rate for both sulfur dioxide and nitrogen oxides and a new percent reduction for sulfur dioxide are calculated to show compliance with the standards.</p>
28	<p>(Boilers B01 and B02) 40CFR60.48Da(f) For the initial performance test required under 40CFR60.8 compliance with the sulfur dioxide emission limitations and percent reduction requirements under 40CFR60.23a and the nitrogen oxides emission limitation under 40CFR60.22a is based on the average emission rates for sulfur dioxide, nitrogen oxides, and percent reduction for sulfur dioxide for the first 30 successive boiler operating days. The initial performance test is the only test in which at least 30 days prior notice is required unless otherwise specified by the Department. The initial performance test is to be scheduled so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.</p>
29	<p>(Boilers B01 and B02) The owner or operator shall submit to the Bureau the SO₂, NO_x and mercury performance test data from the initial performance tests and performance evaluations of the CEMS following the requirements of 40CFR60.49Da to include the applicable performance specification in 40 CFR 60 Appendix B.</p>

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30	(Boilers B01 and B02) 40CFR60.51Da Reports demonstrating compliance with the opacity, sulfur dioxide, nitrogen dioxide, and mercury limits in accordance with 40CFR Part 60 Subpart Da shall be submitted to the Bureau of Air Quality. These reports shall contain information specified in 40CFR60.51Da and shall be submitted quarterly (for opacity and if submitted electronically) or semi-annually (other than opacity, if submitted in written form). Reporting of opacity data meeting the requirements of this regulation shall be waived if operation and reporting of PM CEMS data is maintained.
31	(Boilers B01 and B02) 40 CFR 60.7(c) The owner or operator is required to submit excess emission reports to the Bureau of Air Quality for any calendar quarter during which there are excess emissions from a boiler. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report quarterly stating that excess emissions have not occurred during the reporting period.
32	<p>(Boilers B01 and B02) 40CFR60.7(e)(1)</p> <p>A. Notwithstanding the frequency of reporting requirements specified in Condition 31 of this permit, an owner or operator who is required by 40CFR60 Subpart Da to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:</p> <ul style="list-style-type: none"> i. For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under 40CFR60 Subpart Da continually demonstrate that the facility is in compliance with the applicable standard; ii. The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40CFR60 Subpart Da and the applicable standard; and iii. The Bureau does not object to a reduced frequency of reporting for the affected facility, as provided in paragraph (B) of this condition. <p>B. The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Bureau in writing of his or her intention to make such a change and the Bureau does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Bureau may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Bureau to make a judgment about the source's potential for noncompliance in the future. If the Bureau disapproves the owner or operator's request to reduce the frequency of reporting, the Bureau will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Bureau to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.</p> <p>C. As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the non-complying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Bureau to reduce the frequency of reporting for that standard as provided for in paragraphs (A) and (B) of this condition.</p>

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33	<p>(Boilers B01 and B02) In accordance with SC Regulation 61-62.5, Standard No. 1 - Emissions from Fuel Burning Operations, Section II - Particulate Matter Emissions, the allowable discharge of particulate matter resulting from the fuel burning operations is based on the input heat rate of each unit. Whenever a unit operates below 1,300 million Btu/hr, the limit is 0.6 lb/million Btu for that unit. For input heat rates equal to or above 1,300 million Btu/hr, the limit is expressed as a function of the input heat rate per the following equation:</p> $E = 57.84 P^{-0.637}$ <p>where E = PM emission limit in lb/million Btu, and P = input heat rate in million Btu/hr. At maximum heat capacity of 5,700 million Btu/hr, each unit's limit is 0.234 lb/million Btu input.</p>																																																
34	<p>(Boilers B01 and B02) In accordance with SC Regulation 61-62.5, Standard No. 1 - Emissions from Fuel Burning Operations, Section III - Sulfur Dioxide Emissions, the maximum allowable discharge of sulfur dioxide (SO₂) resulting from the fuel burning operations is 3.5 pounds per million Btu input.</p>																																																
35	<p>(Boilers B01 and B02) These boilers are limited to the following emission rates as allowed by SC Regulation 61-62.1, Section II(J)(2). Each emission limit shall be demonstrated based on a 24-hr block total period. Compliance with these emission limits will demonstrate that the facility is adhering to the premises of the permit application related to mass emissions for PSD applicable pollutants. Reports of daily emission rates shall be submitted quarterly.</p> <table><tr><th>Pollutant</th><th>B01 and B02 Limits</th><th>Method</th><th>Monitoring</th></tr><tr><td>PM₁₀ (filterable)</td><td>1.09 tons/day, each 1.64 tons/day, combined</td><td>201</td><td>Source test and heat input rate</td></tr><tr><td>PM (filterable)</td><td>1.36 tons/day, each 2.05 tons/day, combined</td><td>5, 5B, 17, or CEMS</td><td>Source test and heat input rate or CEMS</td></tr><tr><td>PM₁₀ (total)</td><td>1.64 tons/day, each 2.46 tons/day, combined</td><td>201, 202</td><td>Source test and heat input rate</td></tr><tr><td>PM (total)</td><td>1.64 tons/day, each 2.46 tons/day, combined</td><td>5, 5B, 17, 202</td><td>Source test and heat input rate</td></tr><tr><td>SO₂</td><td>10.92 tons/day, each 16.42 tons/day, combined</td><td>CEMS</td><td>CEMS</td></tr><tr><td>NO_x</td><td>6.37 tons/day, each 9.58 tons/day, combined</td><td>CEMS</td><td>CEMS</td></tr><tr><td>CO</td><td>13.64 tons/day, each 20.52 tons/day, combined</td><td>CEMS</td><td>CEMS</td></tr><tr><td>VOC</td><td>0.22 tons/day, each 0.33 tons/day, combined</td><td>18, 25 or 25A</td><td>Source test and heat input rate</td></tr><tr><td>Lead</td><td>0.0017 tons/day, each 0.0026 tons/day, combined</td><td>29</td><td>Source test and heat input rate</td></tr><tr><td>H₂SO₄</td><td>0.455 tons/day, each 0.684 tons/day, combined</td><td>8</td><td>Source test and heat input rate</td></tr><tr><td>Fluorides</td><td>0.031 tons/day, each 0.047 tons/day, combined</td><td>13</td><td>Source test and heat input rate</td></tr></table> <p>Emission rates for pollutants not relying on CEMS data shall be determined by using the most recent (or initial if the only one) source test result multiplied by the total daily heat input averaged over 24 hours. Only the pollutant having a source test result closest to the emission limit must be calculated for each day of the reporting period. The facility shall list the source test results for the other pollutants and include a single demonstration of compliance with the associated emission limit.</p>	Pollutant	B01 and B02 Limits	Method	Monitoring	PM ₁₀ (filterable)	1.09 tons/day, each 1.64 tons/day, combined	201	Source test and heat input rate	PM (filterable)	1.36 tons/day, each 2.05 tons/day, combined	5, 5B, 17, or CEMS	Source test and heat input rate or CEMS	PM ₁₀ (total)	1.64 tons/day, each 2.46 tons/day, combined	201, 202	Source test and heat input rate	PM (total)	1.64 tons/day, each 2.46 tons/day, combined	5, 5B, 17, 202	Source test and heat input rate	SO ₂	10.92 tons/day, each 16.42 tons/day, combined	CEMS	CEMS	NO _x	6.37 tons/day, each 9.58 tons/day, combined	CEMS	CEMS	CO	13.64 tons/day, each 20.52 tons/day, combined	CEMS	CEMS	VOC	0.22 tons/day, each 0.33 tons/day, combined	18, 25 or 25A	Source test and heat input rate	Lead	0.0017 tons/day, each 0.0026 tons/day, combined	29	Source test and heat input rate	H ₂ SO ₄	0.455 tons/day, each 0.684 tons/day, combined	8	Source test and heat input rate	Fluorides	0.031 tons/day, each 0.047 tons/day, combined	13	Source test and heat input rate
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36	<p>(06 [MT23, MT24, MT25, MT28, MT29, MT30], 07 [CR01]) 40CFR60.672(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of 40CFR60 Subpart OOO shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:</p> <p>(1) Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and</p> <p>(2) Exhibit greater than 7 percent opacity.</p> <p>Initial performance tests required in 40 CFR 60.8 shall be conducted as specified in 40 CFR 60.675. Written reports of the results of all performance tests shall be submitted to the Manager of Source Evaluation Section, Bureau of Air Quality, as specified in SC Regulation 61-62.1, Section IV.</p>
37	<p>(06 [MT20, MT21, MT22, MT26, MT27], 08 [MT34, MT35, MT36]) 40CFR60.672(b) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under 40CFR60.11, no owner or operator subject to the provisions of 40CFR60 Subpart OOO shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity.</p> <p>Initial performance tests required in 40 CFR 60.8 shall be conducted as specified in 40 CFR 60.675. Written reports of the results of all performance tests shall be submitted to the Manager of Source Evaluation Section, Bureau of Air Quality, as specified in SC Regulation 61-62.1, Section IV.</p>
38	<p>(03 [MT10, MT11, MT12], 05 [CR01]) 40CFR60.252(c) On and after the date on which the performance test required to be conducted by 40CFR60.8 is completed, an owner or operator subject to the provisions of 40CFR60 Subpart Y shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.</p>
39	<p>(03-10) In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p>

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40	In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour ($E = 4.10P^{0.67}$) and for process weight rates greater than 30 tons per hour ($E = 55.0P^{0.11} - 40$) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each unit's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:																																
	<table><tr><th>Emission Unit ID</th><th>Process</th><th>Emission Limit (lbs/hr)</th><th>Process Weight Rate (tons/hr)</th></tr><tr><td>03</td><td>Coal Material Transfer (combined equipment)</td><td>76.23</td><td>900</td></tr><tr><td>04</td><td>Petcoke Material Transfer (combined equipment)</td><td>76.23</td><td>900</td></tr><tr><td>05</td><td>Coal-Petcoke Crusher</td><td>76.23</td><td>900</td></tr><tr><td>06</td><td>Limestone Material Transfer (combined equipment)</td><td>53.55</td><td>125</td></tr><tr><td>07</td><td>Limestone Crusher</td><td>53.55</td><td>125</td></tr><tr><td>08</td><td>Gypsum Material Transfer (combined equipment)</td><td>60.50</td><td>240</td></tr><tr><td>09</td><td>Fly Ash Material Transfer (combined equipment)</td><td>63.00</td><td>300</td></tr></table>	Emission Unit ID	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	03	Coal Material Transfer (combined equipment)	76.23	900	04	Petcoke Material Transfer (combined equipment)	76.23	900	05	Coal-Petcoke Crusher	76.23	900	06	Limestone Material Transfer (combined equipment)	53.55	125	07	Limestone Crusher	53.55	125	08	Gypsum Material Transfer (combined equipment)	60.50	240	09	Fly Ash Material Transfer (combined equipment)	63.00	300
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	08	Gypsum Material Transfer (combined equipment)	60.50	240																													
09	Fly Ash Material Transfer (combined equipment)	63.00	300																														
41	(Boilers B01 and B02) These units are subject to SC Regulation 61-62.5, Standard No. 5.1, Best Available Control Technology (BACT)/Lowest Achievable Emission Rate (LAER) Applicable to Volatile Organic Compounds based on “Net VOC Emissions Increase” exceeding 100 tpy. BACT for these sources is determined to be Good Combustion Practices and a limit of 0.0024 lb/million Btu. Good Combustion Practices shall include operating the boilers to minimize VOC emissions by maintaining proper boiler temperature and available excess oxygen for complete combustion.																																
42	(ID03-09, 11) These Material Transfer and Process Systems are subject to all provisions of SC Regulation 61-62.5, Standard No. 7, “Prevention of Significant Deterioration” for PM and PM ₁₀ .																																

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43	(ID03-11) The Best Available Control Technology (BACT) for the Material Transfer and Process Systems for PM emissions was determined to be the following:																																				
	<table><tr><th>Emission Unit ID</th><th>Equipment</th><th>BACT</th><th>Limit</th></tr><tr><td>03</td><td>Coal Material Transfer</td><td>Use of baghouses or water mist dust eliminators, Control of fugitive emissions</td><td>6.57 lb/hr, total; 99% control for sources with baghouses or water mist dust eliminators</td></tr><tr><td>04</td><td>Petcoke Material Transfer</td><td>Use of baghouses or water mist dust eliminators, Control of fugitive emissions</td><td>2.51 lb/hr, total; 99% control for sources with baghouses or water mist dust eliminators</td></tr><tr><td>05</td><td>Coal – Petcoke Crusher</td><td>Use of baghouses or water mist dust eliminators, Control of fugitive emissions</td><td>0.59 lb/hr, total; 99% control for sources with baghouses or water mist dust eliminators</td></tr><tr><td>06</td><td>Limestone Material Transfer</td><td>Use of baghouses or water mist dust eliminators, Control of fugitive emissions</td><td>0.84 lb/hr, total; 99% control for sources with baghouses or water mist dust eliminators</td></tr><tr><td>07</td><td>Limestone Crusher</td><td>Use of baghouses or water mist dust eliminators, Control of fugitive emissions</td><td>0.05 lb/hr, total; 99% control for sources with baghouses or water mist dust eliminators</td></tr><tr><td>08</td><td>Gypsum Material Transfer</td><td>Control of fugitive emissions</td><td>1.30 lb/hr, total</td></tr><tr><td>09</td><td>Fly Ash Material Transfer</td><td>Use of baghouses or water mist dust eliminators, Control of fugitive emissions</td><td>0.045 lb/hr, total; 99% control for sources with baghouses or water mist dust eliminators</td></tr><tr><td>11</td><td>Cooling Tower (each)</td><td>Use of high efficiency drift eliminators (0.0005% drift loss)</td><td>0.466 lb/hr</td></tr></table>	Emission Unit ID	Equipment	BACT	Limit	03	Coal Material Transfer	Use of baghouses or water mist dust eliminators, Control of fugitive emissions	6.57 lb/hr, total; 99% control for sources with baghouses or water mist dust eliminators	04	Petcoke Material Transfer	Use of baghouses or water mist dust eliminators, Control of fugitive emissions	2.51 lb/hr, total; 99% control for sources with baghouses or water mist dust eliminators	05	Coal – Petcoke Crusher	Use of baghouses or water mist dust eliminators, Control of fugitive emissions	0.59 lb/hr, total; 99% control for sources with baghouses or water mist dust eliminators	06	Limestone Material Transfer	Use of baghouses or water mist dust eliminators, Control of fugitive emissions	0.84 lb/hr, total; 99% control for sources with baghouses or water mist dust eliminators	07	Limestone Crusher	Use of baghouses or water mist dust eliminators, Control of fugitive emissions	0.05 lb/hr, total; 99% control for sources with baghouses or water mist dust eliminators	08	Gypsum Material Transfer	Control of fugitive emissions	1.30 lb/hr, total	09	Fly Ash Material Transfer	Use of baghouses or water mist dust eliminators, Control of fugitive emissions	0.045 lb/hr, total; 99% control for sources with baghouses or water mist dust eliminators	11	Cooling Tower (each)	Use of high efficiency drift eliminators (0.0005% drift loss)	0.466 lb/hr
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Control of fugitive emissions may include, but not be limited to, enclosure of transfer points to the extent practical, use of wet suppression if appropriate, proper maintenance of equipment, minimizing or avoiding if possible transfer of material during windy conditions. The facility shall submit a fugitive emission control Best Management Practices plan to the Department for approval, to include justification for any roadways that will not be paved along with methods for controlling fugitive emissions from those roadways; justification for any transfer points not enclosed along with methods for controlling fugitive emissions from those transfer points; methods for controlling fugitive emissions from storage piles; and weather conditions under which materials will not be transferred. The facility will also be required to update the Best Management Practices plan every 5 years or upon any significant change impacting fugitive emissions. The plan shall be maintained on-site and be made available to DHEC personnel as requested.																																					

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44	<p>(03 [MT03, MT08, MT09, SP03], 04 [SP04, MT14], 06 [MT20, MT21, MT26, MT27, SP01] 08 [MT34, MT35, MT36, SP02, SP05], 09 [MT31, MT32]) The permittee shall perform a visual inspection on uncontrolled sources on a semi-annual basis. Visual Inspection means a qualitative observation of opacity during daylight hours where the inspector records results in a log, noting color, duration, density (heavy or light), cause and corrective action taken for any abnormal emissions. The observer does not need to be certified to conduct valid visual inspections. However, at a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, and observer position relative to lighting, wind, and the presence of uncombined water. Logs shall be kept to record all visual inspections, including cause and corrective action taken for any abnormal emissions and visual inspections from date of recording. The owner/operator shall submit semiannual reports.</p>
45	<p>(T04-09 - Ammonia Storage Tanks) It has been determined that these tanks will be subject to SC Regulation 61-62.68, Chemical Accident Prevention Provisions, due to in-process storage or use of a regulated substance in quantities above the specified threshold; therefore, the following must be completed:</p> <ol style="list-style-type: none"> 1. Submittal of a Risk Management Plan (RMP) to the Environmental Protection Agency (EPA) prior to the date the regulated substance is first present above the threshold quantity in a process. 2. Compliance with the Risk Management Program prior to the date the regulated substance is first present above the threshold quantity in a process. 3. Submittal of subsequent revisions/updates of the RMP in accordance with SC Regulation 61-62.68.190. <p>If it is determined by the implementing agency (or other delegated authority) that additional relevant information is needed, this facility will be required to submit the information in a timely manner.</p>
46	<p>(Boilers B01 and B02) These sources are subject to SC Regulation 61-62.96 "Nitrogen Oxides (NO_x) Budget Trading Program," CAIR, SC Regulation 61-62.60-Subpart – Subpart HHHH "CAMR", and the Acid Rain Program and shall comply with all applicable provisions.</p>

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47	<p>(Boilers B01 and B02) The owners and operators, and to the extent applicable, the NO_x authorized account representative of a NO_x Budget unit, shall comply with the monitoring and reporting requirements as provided in Subpart H of SC Regulation 61-62.96 and in Subpart H of 40 CFR 75. For purposes of complying with such requirements, the definitions in SC Regulation 61-62.96.2 and in 40 CFR part 72 section 72.2 shall apply, and the terms “affected unit,” “designated representative,” and “continuous emission monitoring system” (or “CEMS”) in 40 CFR 75 shall be replaced by the terms “NO_x Budget unit,” “NO_x authorized account representative,” and “continuous emission monitoring system” (or “CEMS”), respectively, as defined in SC Regulation 61-62.96.2.</p> <p>The NO_x authorized account representative shall comply with all record keeping and reporting requirements in SC Regulation 61-62.96.72 and with the requirements of SC Regulation 61-62.96.10(e). Quarterly reports, as specified in SC Regulation 61-62.96.72(d), shall be sent electronically to EPA or to the addresses listed below.</p> <p style="text-align: center;">US EPA, Region 4 Air Enforcement Branch 61 Forsyth Street Atlanta, GA 30303</p> <p>If the NO_x authorized account representative for a NO_x Budget unit subject to an Acid Rain Emission limitation who signed and certified any submission that is made under subpart F or G of 40 CFR part 75 and which includes data and information required under this subpart or subpart H of 40 CFR part 75 is not the same person as the designated representative or the alternative designated representative for the unit under 40 CFR part 72, the submission must also be signed by the designated representative or the alternative designated representative.</p> <p>Unless otherwise provided, the owners and operators of the NO_x Budget source and each NO_x Budget unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Department or the EPA.</p> <ul style="list-style-type: none"> (i) The account certificate of representation for the NO_x authorized account representative for the source and each NO_x Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with Section 96.13; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NO_x authorized account representative. (ii) All emissions monitoring information, in accordance with subpart H of this regulation; provided that to the extent that subpart H of this regulation provides for a 3-year period for record keeping, the 3-year period shall apply. (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x Budget Trading Program. (iv) Copies of all documents used to complete a NO_x Budget permit application and any other submission under the NO_x Budget Trading Program or to demonstrate compliance with the requirements of the NO_x Budget Trading Program.

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48	<p>(Boilers B01 and B02) These requirements shall be met until the state CAIR is repealed or until CAIR is replaced.</p> <p>These units are subject to limits, monitoring, record keeping, and reporting as specified in the Clean Air Interstate Rule (CAIR) and any related State Implementation Plan rules. Implementation of NO_x reductions are required by January 1, 2009, and for SO₂ reductions by January 1, 2010. The facility shall submit a CAIR NO_x permit application, a CAIR NO_x Ozone Season permit application, and a CAIR SO₂ permit application by the dates specified in the regulations for new units. A CAIR permit shall be issued to include each CAIR NO_x unit, each CAIR NO_x Ozone Season unit, and each CAIR SO₂ unit, and incorporated into this Title V permit.</p> <p>The owners and operators, and to the extent applicable, the CAIR designated representative, of each CAIR unit shall comply with the monitoring, record keeping, and reporting requirements of the CAIR regulations. Each CAIR NO_x unit and each CAIR NO_x Ozone Season unit shall also comply with 40 CFR 75, Subpart H, and each CAIR SO₂ unit shall also comply with 40 CFR 75, Subparts F and G. Compliance with monitoring system certification requirements for CAIR NO_x units, CAIR NO_x Ozone Season units, and SO₂ CAIR units shall be demonstrated by the dates specified in the regulations for new units.</p> <p>The CAIR designated representative shall submit quarterly reports to EPA in electronic format no later than 30 days following the end of each reporting quarter. Data shall include NO_x mass emission data, SO₂ mass emission data, and heat input data for each CAIR unit. CAIR NO_x unit, CAIR NO_x Ozone Season unit, and CAIR SO₂ unit initial reporting shall cover the periods as specified in the regulations for new units.</p>
49	<p>(Boilers B01 and B02) This is a state-only standard. These requirements will be met until this state regulation is repealed.</p> <p>These units are subject to limits, monitoring, record keeping, and reporting as specified in SC Reg 61-62.60 Subpart HHHH – the Clean Air Mercury Rule (CAMR) and any related State Implementation Plan rules. A CAMR permit shall be issued to include each CAMR unit and incorporated into this Title V permit.</p> <p>The facility shall install and maintain either a CEMS or a sorbent trap for continuous measurement of mercury emissions. The owners and operators, and to the extent applicable, the CAMR designated representative, of each CAMR unit shall comply with the monitoring, record keeping, and reporting requirements of the CAMR regulations. Each CAMR unit shall continue to comply with applicable parts of 40 CFR 72 and 40 CFR 75. Should the facility desire to use any alternative monitoring system, a petition shall be submitted to the Bureau for consideration of approval. Implementation of emissions monitoring and reporting is required by the dates specified in the regulation for new units. Compliance with budget allowances is required by the date specified in the regulation for new units. The facility shall submit a CAMR Hg permit application by the date specified in the regulation for new units.</p> <p>The CAMR designated representative shall submit quarterly reports to EPA in electronic format no later than 30 days following the end of each reporting quarter. Data shall include hourly and cumulative Hg mass emission data, hourly and cumulative heat input (if applicable), and results of required QA tests. CAMR unit initial reporting shall cover the period as specified in the regulation for new units. The CAMR designated representative shall submit compliance reports semi-annually.</p> <p>Should there be changes to this regulation prior to the applicability dates that change or add to the above requirements, the facility shall request a modification to this permit to incorporate such changes.</p>

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50	<p>(Boilers B01 and B02) These sources are subject to 40 CFR 64, Compliance Assurance Monitoring and shall comply with all applicable provisions.</p> <p>Unless exempted from these requirements as specified in condition 51, to meet the requirements of 40 CFR 64 for Emission Units No. 01 and 02 (Boilers 01 and 02), the indicator for PM will be opacity. The owner/operator shall install, continue to operate, and maintain a COMS in the exhaust gas stack location as the measurement approach. COMS shall be used to provide assurance of compliance with applicable requirement that has subjected the facility to CAM.</p> <p>The operational ranges for the opacity, with supporting documentation and quality assurance procedures, shall be submitted to the Bureau for approval within 180 days of the startup date of these new sources. At that time an excursion for monitoring parameters shall also be defined. These operational ranges for the monitored parameters shall be derived from data which demonstrates a reasonable assurance of compliance. Process and capture system operational parameters shall be monitored during the stack tests and operational ranges or inspection and maintenance activities shall be developed for these parameters to reflect proper operation and maintenance of the control device and capture system. Testing must be conducted in accordance with SC Regulation 61-62.1, Section IV, Source Tests. The owner or operator shall coordinate with the Source Evaluation Section of this Bureau, and the test must be performed according to a protocol approved by this Department. The Bureau shall be notified not less than two (2) weeks before the initiation of the test and the final test report must be submitted no later than 30 days after completion of on-site testing.</p> <p>The operational range, exceedance and excursion information shall be incorporated into the facility's Part 70 (Title V) Operating Permit once all appropriate testing has been completed and the test results have been approved by the Bureau. Such incorporation will represent a minor modification to the permit. The facility shall provide all relevant information for this modification, including a listing of the exact changes needed to the existing Title V permit as required by Part 70 regulations. The facility shall update their CAM plan with this information as appropriate.</p>
51	<p>(Boilers B01 and B02) These sources shall be exempted from 40 CFR 64, Compliance Assurance Monitoring, for PM, SO₂ and NO_x if the facility requests the CEMS for these pollutants be designated as continuous compliance demonstration monitoring (CCDM). If CCDM status is not requested or granted, the facility shall submit CAM plans for these pollutants within 180 days of startup of these new sources.</p>
52	<p>The emergency generators and fire pump (D01, D02, and F01) have been determined to be exempt from construction permitting requirements in accordance with South Carolina Regulation 61-62.1 Section II.F.2.e and as such are listed as exempt sources in this permit. The emergency generators shall still comply with the requirements of all applicable regulations including but not limited to the following items (1) and (2). The fire pump shall still comply with the requirements of all applicable regulations including but not limited to the following item (1):</p> <ul style="list-style-type: none"> (1) New Source Performance Standards (NSPS) 40 CFR 60 Subparts A (General Provisions) and IIII (Stationary Compression Ignition Internal Combustion Engines) (2) National Emission Standards For Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A (General Provisions) and ZZZZ (Stationary Reciprocating Internal Combustion Engines) <p>Based on the fire pump being less than 500 HP, it is not an affected source for 40 CFR 63 Subpart ZZZZ.</p>
53	<p>(D01 and D02) These generators have been defined as emergency generators, in accordance with 40 CFR 63 Subpart ZZZZ. Therefore, they do not have to meet the requirements of the subpart or of Subpart A of 40 CFR 63 except for the initial notification requirements of 40 CFR 63.6645(d).</p>

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54	(Boilers B01 and B02) The owner/operator shall install equipment associated with these boilers in a manner that should future specific controls for mercury be required, the installed equipment will accommodate the anticipated space necessary for the future mercury controls.
55	The cooling towers shall meet the PM BACT requirement to operate with a drift loss of 0.0005%. The drift eliminators shall be maintained and operated to ensure the emission units are in compliance with applicable requirements and in accordance with manufacturer's specifications and/or standard operating practices. The permittee shall conduct an initial performance test based on Cooling Technology Institute (CTI) Acceptance Test Code (ATC) # 140 to verify drift percent achieved by the drift eliminator. The permittee shall monitor total dissolved solids content of the circulating water on a monthly basis. Compliance with the lbs/hr emission limitation shall be demonstrated by multiplying the drift loss factor of 0.0005% multiplied by the water circulated in the cooling cells (gallons per hour) then multiplied by the TDS concentration (mg/L) and then converted from milligrams per minute to pounds per hour. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 8,760 hours and dividing by 2,000 lbs/ton. If requested by the Bureau, the permittee shall submit a testing proposal which will demonstrate that the maximum drift loss does not exceed 0.0005%.
56	To demonstrate adherence to efficient combustion and emission control practices, the facility shall install and operate carbon monoxide (CO) CEMS on each boiler system. These CEMS shall be operated according to established and approved QA/QC practices and data shall be summarized to provide 30-day rolling averages. These averages shall be maintained on site and submitted to the Bureau on a quarterly basis with any averages that exceed the BACT emission limits noted and explained.
57	If construction does not commence on the PSD affected source within 18 months after the effective date of a permit pursuant to the PSD regulations, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time, as determined by the Bureau, the owner/operator may be required to re-evaluate its BACT analysis.
58	This permit contains emission limits based on the current attainment status of the area and consistent with other State and Federal requirements. Prior to the start of operation, should the area be designated non-attainment for ozone or PM (PM ₁₀ or PM _{2.5}), or if the Department determines that further reductions at the proposed site may be needed to prevent a possible non-attainment designation, the Department may reopen this permit and the current emissions limits may be revised to address attainment of these standards. The owner or operator is advised to take appropriate steps to assure that operations and/or control devices permitted herein can be readily modified, added to, or retrofitted.
59	(ID01-02) The owner/operator shall maintain daily monitoring of the petcoke blend ratio. This blend shall not exceed 30% by weight petcoke. When using petcoke, the petcoke blend ratio shall be calculated daily by measuring the weight of the petcoke burned as well as the weight of the entire coal/petcoke mixture. Records of daily petcoke blend ratios shall be submitted quarterly.
60	This facility has requested that the use of baghouses for controlling particulate matter emissions from material handling equipment as specified in the initial application be changed to allow use of either baghouses or functionally equivalent water mist dust eliminators. The Bureau will allow the use of functionally equivalent water mist dust eliminators instead of baghouses. This approval is contingent on the facility submitting detailed water mist dust eliminator information and getting written approval from the Bureau verifying equivalency before installing any water mist dust eliminator.
61	(D01, D02, and F01) The type of fuel used in these emergency generators shall be limited to ultra low sulfur fuel oil (containing a maximum of 0.0015% sulfur) if it is commercially available, otherwise use of fuel oil containing 0.05% or less sulfur will be acceptable.

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62	In addition to any other provision of this permit, the Department retains the authority to reopen and revise this permit to incorporate additional requirements related to carbon dioxide and other greenhouse gas emissions as necessary to comply with state or federal statutes or rules.
Case-by-Case MACT Requirements	
63	The owner/operator shall comply with 40 CFR 63, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories, Subparts A (General Provisions) and B (Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112(g) and 112(j)) and SC 61-62.63, Subparts A and B, as applicable.
64	All provisions contained in this final Notice of MACT Approval (NOMA), as contained in this permit, shall be federally enforceable upon the effective date of issuance of such notice, as provided by SC Regulation 61-63.43(j). [SC Regulation 61-63.43(g)(3)]
65	The case-by-case MACT requirements apply to two nominal 5,700 million Btu/hr (660 MW gross output) pulverized coal fired boilers to be located at the proposed site described as the Pee Dee Generating Station located at 2651 Old South River Road, Pamplico, SC.
66	The following controls shall be installed and operated on each of the two boilers. (a) Fabric Filters (FF) for control of PM ₁₀ , Mercury, and Non-mercury Metal HAPs. (b) Flue Gas Desulfurization (FGD) for control of SO ₂ , Mercury, and Acid Gas HAPs. (c) Low NOx Burners (LNB), Separated Overfire Air (SOFA), and Selective Catalytic Reduction (SCR) for control of Mercury. During operation of these boilers, all control devices shall be operated consistent with the technological limitations, manufacturer's specifications, and good engineering and maintenance practices for the control devices.
67	These boilers are permitted to burn bituminous coal, or bituminous coal with petcoke blended up to 30% by composite weight (i.e., 30% petcoke and 70% coal) as fuel. Ultra low sulfur fuel oil (or fuel oil No. 2 containing 0.05% or less sulfur if ultra low sulfur fuel oil is not commercially available) and natural gas may be used for initial firing of each boiler during startup in addition to periods requiring flame stabilization. The use of any other substances as fuel is prohibited without prior written approval from the Department.
68	All official correspondence, plans, application forms, and written statements are an integral part of this permit.
69	The owner/operator shall submit written notification to the Director of the Engineering Services Division of the date construction is commenced, postmarked no later than 30 days after such date, and written notification of the actual date of initial startup of each new or altered source, postmarked within 15 days after such date.
70	The owner or operator shall comply with all terms, conditions, and limitations of this case-by case MACT determination, as contained in this permit..

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71	Pursuant to 40 CFR 63.43(g) and SC Regulation 61-63.43(g)(1), MACT determination, the permittee shall comply with the following emissions limitations for HAP emissions:		
	EMISSION LIMITATIONS (TABLE 2)		
	Pollutant	Emission limit (Each Boiler)	Averaging Period
	Filterable PM ₁₀ (as a surrogate for Non-Mercury Metal HAPs)	0.012 lb/million Btu	30-day
	SO ₂ (as a surrogate for Acid Gases)	0.12 lb/million BTU	30-day
	CO (as a surrogate for Organic HAPs)	0.15 lb/million Btu	30-day
	Mercury	8.0E-06 lbs/MWh 46.3 lbs/yr	12 month rolling average
72	The owner/operator must be in compliance with the emissions limitations in Table 2, including operating limits, at all times, except during periods of startup, shutdown, and malfunction.		
73	The owner/operator must always operate and maintain each boiler, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i).		
74	The owner/operator must develop a written startup, shutdown, and malfunction plan, as outlined in 40 CFR 63.6(e)(3), that describes, in detail, procedures for operating and maintaining each boiler during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the emission limitations in Table 2. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause either boiler to exceed an emission limitation. This plan must be developed by the owner/operator by startup. During periods of startup, shutdown, and malfunction, the owner/operator must operate each boiler in accordance with the startup, shutdown, and malfunction plan.		
75	Consistent with 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if the owner/operator demonstrate to the Administrator's satisfaction that the owner/operator was operating in accordance with the startup, shutdown, and malfunction plan. The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in 40 CFR 63.6(e).		

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76	In order to demonstrate initial compliance with the emissions limitations in Table 2, the owner/operator must conduct performance tests, set operating limits, and conduct monitoring equipment performance evaluations within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial startup.		
	INITIAL COMPLIANCE REQUIREMENTS (Table 3)		
	Pollutant	Emission Limit (Each Boiler)	Method
	Filterable PM ₁₀ (as a surrogate for Non-Mercury Metal HAPs)	0.012 lb/million Btu	As Approved by the Bureau
	SO ₂ (as a surrogate for Acid Gases)	0.12 lb/million BTU	As Approved by the Bureau
	CO (as a surrogate for Organic HAPs)	0.15 lb/million Btu	As Approved by the Bureau
	Mercury (Hg)	8.0E-06 lbs/MWh 46.3 lbs/yr	As Approved by the Bureau
	Hydrogen Chloride (HCl)	2.72E-03lb/million Btu	As Approved by the Bureau
	Hydrogen Fluoride (HF)	3.40E-04lb/million Btu	As Approved by the Bureau
77	The owner/operator shall conduct each performance test listed in Table 3 in accordance with paragraphs (a) through (d).		
	(a) The owner/operator must conduct each performance test according to 40 CFR 63 Section 63.7 and SC Regulation 61-62.1 Section IV – Source Tests. (b) The owner/operator may not conduct performance tests during periods of startup, shutdown, or malfunction. (c) The owner/operator must conduct each performance test at representative performance (i.e., performance based on normal operating conditions) and must demonstrate initial compliance based on this test. (d) Notification of intent to source test, submittal of site-specific test plans, performance of source tests, and the reporting of source test results shall comply with 40 CFR 63 Section 63.7, 63.10 and with South Carolina Regulation 61-62.1, Section IV, Source Tests. The owner/operator shall submit a site specific test plan at least 60 calendar days before the performance test is scheduled to take place. The Department must be notified at least two weeks prior to a source test so that a Department representative may be present.		
78	Pursuant to 40 CFR 63.43 (g)(2)(ii) and SC Regulation 61-63.43(g)(2), the owner/operator shall conduct the following monitoring to assure continuous compliance with the applicable emission limitations in Table 2:		
	CONTINUOUS COMPLIANCE REQUIREMENTS (Table 4)		
	Pollutant	Monitoring (Each Boiler)	
	Filterable PM ₁₀ (as a surrogate for Non-Mercury Metal HAPS)	PM CEMS	
	SO ₂ (as a surrogate for Acid Gases)	CEMS	
	CO (as a surrogate for Organic HAPS)	CEMS	
	Mercury	CEMS	
	Hydrogen Chloride (HCl)	Annual Source Test	
	Hydrogen Fluoride (HF)	Annual Source Test	
79	All source tests shall be conducted in accordance with 40 CFR 63.7 and SC Regulation 61- 62.1, Section IV, Source Tests and as required in the “Initial Compliance Requirements” section of this permit.		
80	The owner/operator shall install, operate, and maintain continuous emissions monitor systems (CEMS) for monitoring and reporting of emissions of PM, CO and mercury.		

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81	<p>The owner/operator must install, operate, and maintain each CEMS according to the requirements in 40 CFR 63.8 and in paragraphs (a) through (f) of this section.</p> <ul style="list-style-type: none"> (a) Install, operate, and maintain each CEMS according to 40 CFR 63.8(c) and the appropriate Performance Specification in 40 CFR 60, appendix B. (b) Conduct a performance evaluation of each CEMS according to the requirements of 40 CFR 63.8 and the appropriate Performance Specification in 40 CFR 60, appendix B. (c) As specified in 63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. (d) Reduce CEMS data as specified in 40 CFR 63.8(g)(2). (e) Record the results of each inspection, calibration, and validation check. (f) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner/operator must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating.
82	<p>To demonstrate continuous compliance with the SO₂ and CO emission limitations in Table 2, the owner/operator must utilize the CEMS data to calculate and record a 30-day rolling average emission rate on a daily basis. A new 30-day rolling average emission rate is calculated as the average of all of the hourly SO₂ and CO emission data for the preceding 30 operating days. For purposes of calculating data averages, data recorded during periods of monitoring malfunctions, associated repairs, out-of control periods, required quality assurance or control activities must not be used. All the data collected during all other periods in assessing compliance must be used. Any period for which the monitoring system is out of control and data are not available for required calculations constitutes a deviation from the monitoring requirements.</p>
83	<p>For the mercury CEMS, the owner/operator must develop and submit to the Department for approval a unit specific monitoring plan.</p>
84	<p>To demonstrate continuous compliance with the mercury emission limitations in Table 2, the owner/operator shall install, calibrate and maintain a continuous emission monitoring system. Compliance with the mercury emission limitations shall be based on the total mercury emissions from each boiler and total gross MWh from each boiler during the compliance period. The owner/operator shall calculate the mercury emission rate in lb/MWh for each calendar month of the year using hourly mercury concentrations measured by the CEMS and hourly gross electrical outputs. Compliance with the lb/MWh mercury emission limits shall be determined on a 12-month rolling average basis. Compliance with the lb/yr mercury emission limit shall be determined on a 12-month rolling sum basis.</p>
85	<p>A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.</p>
86	<p>To demonstrate continuous compliance with the filterable PM₁₀, HCl and HF emission limitations in Table 2, the owner/operator must conduct annual performance tests for filterable PM₁₀, HCl, HF.</p>
87	<p>The owner/operator must submit all of the notifications in 40 CFR 63.6(h)(4) and 63.6(h)(5), 63.7(b) and 63.7(c), 63.8(e), 63.8(f)(4) and 63.8(f)(6), and 63.9(b) through (h) that apply to the owner/operator by the dates specified.</p>

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88	<p>The owner/operator must submit a Notification of Compliance Status report according to 40 CFR 63.9(h)(2)(ii) and the requirements specified in paragraphs (a) through (c) of this section.</p> <ul style="list-style-type: none"> (a) For each initial compliance demonstration, the owner/operator must submit the Notification of Compliance Status report, including all performance test results, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR 63.10(d)(2). (b) The Notification of Compliance Status report must contain all the information specified in paragraphs (i) through (iv) of this section, as applicable. <ul style="list-style-type: none"> (i) A description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source description of the fuel(s) burned, and justification for the worst-case fuel burned during the performance test. (ii) Summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits. (iii) A signed certification that the owner/operator has met all emissions limitations. (iv) If had a deviation from any emission limitation, the owner/operator must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.
89	The owner/operator shall submit notification for the CEMS as required by 40 CFR 63 Subpart A.
90	The owner/operator shall keep records as required by 40 CFR 63 Subpart A.
91	<p>The owner/operator must keep records according to paragraphs (a) through (c) of this section.</p> <ul style="list-style-type: none"> (a) A copy of each notification and report that the owner/operator submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the owner/operator submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). (b) The records in 40 CFR 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. (c) Records of performance tests or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).
92	<p>For each monitoring system required by this subpart, the owner/operator must keep records according to paragraphs (a) through (c) of this section.</p> <ul style="list-style-type: none"> (a) Records described in 40 CFR 63.10(b)(2)(vi) through (xi). (b) Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3). (c) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.
93	The owner/operator records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1).
94	As specified in 40 CFR 63.10(b)(1), the owner/operator must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
95	The owner/operator must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.1(b)(1). The owner/operator can keep the records offsite for the remaining 3 years.

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96	The owner/operator shall maintain on file all measurements including continuous monitoring system or monitoring device performance measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required in a permanent form.
97	The owner/operator shall submit reports as required by 40 CFR 63 Subpart A.
98	<p>The owner/operator must submit a semiannual compliance report to the Department according to the requirements in paragraphs (a) through (d) of this section.</p> <ul style="list-style-type: none"> (a) The first compliance report must cover the period beginning at startup and ending on June 30 or December 31, and lasting at least 6 months, but less than 12 months. (b) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the first compliance report is due. (c) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. (d) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.
99	<p>The compliance report must contain the information required in paragraphs (a) through (e) and, as applicable, paragraphs (f) through (h).</p> <ul style="list-style-type: none"> (a) Company name and address. (b) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. (c) Date of report and beginning and ending dates of the reporting period. (d) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable. (e) If the owner/operator had a startup, shutdown, or malfunction during the reporting period and the owner/operator took actions consistent with the SSMP, the compliance report must include the information in 40 CFR 63.10(d)(5)(i). (f) If there are no deviations from any of the emission limitations or operating limits, a statement that there were no deviations from the emissions limitations during the reporting period. A deviation occurs when monitoring data shows exceedance of 112(g) requirements. (g) If there were no periods during which a CEMS was out-of-control as specified in 63.8(c)(7), a statement that there were no periods during which the CMS were out-of-control during the reporting period. (h) For each deviation from an emissions limitation, the owner/operator must include the information in (i) through (xi). This includes periods of startup, shutdown, and malfunction. <ul style="list-style-type: none"> (i) The date and time that each malfunction started and stopped and description of the nature of the deviation. (ii) The date and time that each CEMS was inoperative, except for zero (lowlevel) and high-level checks. (iii) The date, time, and duration that each CEMS was out-of-control, including the information in 40 CFR 63.8(c)(8). (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period. (v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period. (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes. (vii) A summary of the total duration of CEMS downtime during the reporting period and the total duration of CEMS downtime as a percent of the total source operating time during that reporting period. (viii) A brief description of the source for which there was a deviation.

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	<ul style="list-style-type: none"> (ix) A brief description of each CEMS for which there was a deviation. (x) The date of the latest CEMS certification or audit for the system for which there was a deviation. (xi) A description of any changes in CEMS, processes, or controls since the last reporting period for the source for which there was a deviation.
100	If an action taken by the owner/operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in boilers' startup, shutdown, and malfunction plan, and either boiler exceeds any emission limitation in Table 2, then the owner/operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with 40 CFR 63.10(d)(5) (unless the owner/operator makes alternative reporting arrangements, in advance, with the Department).
101	In addition to complying with this MACT determination, the owner/operator shall comply with the electric utility MACT Standard upon promulgation, within the timeframes allowed by 40 CFR 63, Subpart B and SC 61-62.63, Subpart B.
102	The owner/operator shall install equipment associated with the boilers in a manner that should future specific controls for mercury be required, the installed equipment will accommodate the anticipated space necessary for the future mercury controls.
103	(Boilers B01 and B02) The owner/operator shall comply with the most stringent hazardous air pollutant (or surrogate) emission limits established through the Notice of MACT Approval and any state or federal statutes or rules. The Department retains the authority to reopen and revise this permit to incorporate additional requirements related to air toxics emissions as necessary to comply with state or federal statutes or rules.
104	In addition to installing, operating and maintaining a continuous emissions monitor systems (CEMS) for monitoring and reporting of emissions of mercury, the facility shall install, maintain and operate an ambient mercury monitoring station and associated meteorological station. The facility shall submit a mercury monitoring plan for review and approval to the Department within 180 days of start of construction.

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105	<p>Santee Cooper shall conduct a sorbent injection mercury control trial study on the first pulverized coal combustion unit to become operational. The purpose of the study will be to assess the following: (1) whether sorbent injection (to include activated carbon injection) in combination with co-benefit controls (SCR + FF + FGD) can produce mercury emission reductions greater than what is achieved with co-benefit controls alone and how much of an improvement in mercury reduction (if any) can be achieved; and (2) whether a non-carbon sorbent injection method can be found that will avoid the potential problem of flyash contamination from carbon-based sorbent injection that might require landfilling of flyash and prevent selling of flyash for commercial use. In addition to investigation of a non-carbon sorbent injection method for avoidance of flyash contamination, Santee Cooper shall have the option of including in the trial study a feasibility assessment of flyash beneficiation methods that might serve to enhance flyash commercial use with carbon-based sorbent injection in use. Such beneficiation methods might include carbon burnout technology.</p> <p>The mercury control trial study shall be conducted over a six-month period (but not necessarily continuously for six months) to account for the effect of variability in coal mercury content over a prolonged period of time. The study should include operation with and without petcoke combustion to assess the effect of petcoke combustion on mercury emissions.</p> <p>A plan for the mercury control trial study shall be submitted to the Department for approval no later than six months before the first pulverized coal combustion unit is expected to begin commercial operation. The plan shall include the date by which Santee Cooper proposes to begin the trial study.</p> <p>A report providing results of the mercury control trial study shall be submitted to the Department within 60 days from the conclusion of the study. The report shall include information on the cost of mercury control as indicated from actual costs incurred during the performance of the trial study.</p>

E. EXEMPT SOURCES

Equip ID	Exempt Source Description	Basis
D01	Emergency Generator	SC Reg 61-61.1, Section II.F.2.e
D02	Emergency Generator	SC Reg 61-61.1, Section II.F.2.e
F01	Emergency Fire Pump	SC Reg 61-61.1, Section II.F.2.e
T01-T03, T10-T16, T28	(11) Oil Storage Tanks	SC Reg 61-62.1, Section II.B.2.h
T04-T09	(6) Anhydrous Ammonia Storage Tanks	SC Reg 61-62.1, Section II.B.2.h
T17-T20	(4) Sulfuric Acid Storage Tanks	SC Reg 61-62.1, Section II.B.2.h
T21-T22	(2) Sodium Hydroxide Storage Tanks	SC Reg 61-62.1, Section II.B.2.h
T-23-T26	(4) Hypochlorite Storage Tanks	SC Reg 61-62.1, Section II.B.2.h
T27	(1) Organic Acid Storage Tank	SC Reg 61-62.1, Section II.B.2.h
T29	(1) Gasoline Storage Tank	SC Reg 61-62.1, Section II.B.2.h


 Elizabeth J. Basil, Director
 Engineering Services Division
 Bureau of Air Quality

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STANDARD NO. 2 - MODELED NAAQS EMISSION RATES (LBS/HR)					
SOURCE IDENTIFICATION	TSP	PM₁₀	SO₂¹	NO_x	CO
POINT SOURCES					
B01	102.38	102.38	684.00	399.00	912.00
B02	102.38	102.38	684.00	399.00	912.00
CR01	0.585	0.225	--	--	--
CR02	0.049	0.019	--	--	--
CT01A	0.389	0.389	--	--	--
CT01B	0.389	0.389	--	--	--
CT01C	0.389	0.389	--	--	--
CT01D	0.389	0.389	--	--	--
CT01E	0.389	0.389	--	--	--
CT01F	0.389	0.389	--	--	--
CT01G	0.389	0.389	--	--	--
CT01H	0.389	0.389	--	--	--
CT01I	0.389	0.389	--	--	--
CT01J	0.389	0.389	--	--	--
CT01K	0.389	0.389	--	--	--
CT01L	0.389	0.389	--	--	--
CT02A	0.389	0.389	--	--	--
CT02B	0.389	0.389	--	--	--
CT02C	0.389	0.389	--	--	--
CT02D	0.389	0.389	--	--	--
CT02E	0.389	0.389	--	--	--
CT02F	0.389	0.389	--	--	--
CT02G	0.389	0.389	--	--	--
CT02H	0.389	0.389	--	--	--
CT02I	0.389	0.389	--	--	--
CT02J	0.389	0.389	--	--	--
CT02K	0.389	0.389	--	--	--
CT02L	0.389	0.389	--	--	--
MT01	0.017	0.008	--	--	--
MT02	0.017	0.008	--	--	--

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MT04	0.017	0.008	--	--	--
MT05	0.017	0.008	--	--	--
MT10	0.017	0.008	--	--	--
MT11	0.017	0.008	--	--	--
MT15	0.017	0.008	--	--	--
MT16	0.011	0.005	--	--	--
MT17	0.011	0.005	--	--	--
MT18	0.011	0.005	--	--	--
MT19	0.011	0.005	--	--	--
MT23	0.001	0.001	--	--	--
MT24	0.001	0.001	--	--	--
MT25	0.001	0.001	--	--	--
MT28	0.001	0.001	--	--	--
MT29	0.001	0.001	--	--	--
MT30	0.001	0.001	--	--	--
MT33	0.001	0.001	--	--	--
S01	0.017	0.008	--	--	--
S02	0.017	0.008	--	--	--
S03	0.017	0.008	--	--	--
S04	0.017	0.008	--	--	--
S05	0.017	0.008	--	--	--
S06	0.017	0.008	--	--	--
S07	0.017	0.008	--	--	--
S08	0.017	0.008	--	--	--
S09	0.017	0.008	--	--	--
S10	0.017	0.008	--	--	--
S11	0.017	0.008	--	--	--
S12	0.017	0.008	--	--	--
POINT SOURCE TOTALS	215.104	214.519	1368	798	1891
VOLUME SOURCES					
MT03	1.738	0.817	--	--	--
MT08	1.738	0.817	--	--	--
MT09	1.738	0.817	--	--	--

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MT14	1.738	0.817	--	--	--
MT20	0.132	0.062	--	--	--
MT21	0.132	0.062	--	--	--
MT22	0.132	0.062	--	--	--
MT26	0.132	0.062	--	--	--
MT27	0.132	0.062	--	--	--
MT34	0.254	0.120	--	--	--
MT35	0.254	0.120	--	--	--
MT36	0.254	0.120	--	--	--
SP01	0.178	0.106	--	--	--
SP02	0.272	0.163	--	--	--
SP03	1.056	0.632	--	--	--
SP04	0.758	0.455	--	--	--
SP05	0.272	0.163	--	--	--
VOLUME SOURCE TOTALS	10.91	5.457	--	--	--
FACILITY TOTALS	226.0	220.0	1368	798	1824
1) SO ₂ -3hr concentrations are based on an emission rate double that of the other periods. B01 = 1368 lb/hr and B02 = 1368 lb/hr, for a facility total of 2736lb/hr. This was in response to an EPA comment concerning a possible 3-hr emission limit.					

STANDARD NO. 2 - MODELED NAAQS EMISSION RATES (LBS/HR)		
SOURCE IDENTIFICATION	HF	LEAD
B01	1.94	0.11
B02	1.94	0.11
Facility Totals	3.88	0.22

STANDARD NO. 7 - MODELED PSD CLASS II INCREMENT EMISSION RATES (LBS/HR)			
STACK ID	Minor Source Baseline Date(s)		
	9/28/78	9/28/78	N/A
	PM₁₀	SO₂⁽²⁾	NO_x⁽¹⁾
POINT SOURCES			
B01	102.38	684.00	399.00
B02	102.38	684.00	399.00
CR01	0.225	--	--
CR02	0.019	--	--
CT01A	0.389	--	--

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CT01B	0.389	--	--
CT01C	0.389	--	--
CT01D	0.389	--	--
CT01E	0.389	--	--
CT01F	0.389	--	--
CT01G	0.389	--	--
CT01H	0.389	--	--
CT01I	0.389	--	--
CT01J	0.389	--	--
CT01K	0.389	--	--
CT01L	0.389	--	--
CT02A	0.389	--	--
CT02B	0.389	--	--
CT02C	0.389	--	--
CT02D	0.389	--	--
CT02E	0.389	--	--
CT02F	0.389	--	--
CT02G	0.389	--	--
CT02H	0.389	--	--
CT02I	0.389	--	--
CT02J	0.389	--	--
CT02K	0.389	--	--
CT02L	0.389	--	--
MT01	0.008	--	--
MT02	0.008	--	--
MT04	0.008	--	--
MT05	0.008	--	--
MT10	0.008	--	--
MT11	0.008	--	--
MT15	0.008	--	--
MT16	0.005	--	--
MT17	0.005	--	--
MT18	0.005	--	--

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MT19	0.005	--	--
MT23	0.001	--	--
MT24	0.001	--	--
MT25	0.001	--	--
MT28	0.001	--	--
MT29	0.001	--	--
MT30	0.001	--	--
MT33	0.001	--	--
S01	0.008	--	--
S02	0.008	--	--
S03	0.008	--	--
S04	0.008	--	--
S05	0.008	--	--
S06	0.008	--	--
S07	0.008	--	--
S08	0.008	--	--
S09	0.008	--	--
S10	0.008	--	--
S11	0.008	--	--
S12	0.008	--	--
POINT SOURCE TOTALS	214.5	1368	798
VOLUME SOURCES			
MT03	0.817	--	--
MT08	0.817	--	--
MT09	0.817	--	--
MT14	0.817	--	--
MT20	0.062	--	--
MT21	0.062	--	--
MT22	0.062	--	--
MT26	0.062	--	--
MT27	0.062	--	--
MT34	0.120	--	--
MT35	0.120	--	--

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MT36	0.120	--	--
SP01	0.106	--	--
SP02	0.163	--	--
SP03	0.632	--	--
SP04	0.455	--	--
SP05	0.163	--	--
VOLUME SOURCE TOTALS	5.457	--	--
FACILITY TOTALS	220.0	1368	798
1) There is no MSBD for NO _x in Florence county at this time. This project sets the MSBD.			
2) SO ₂ -3hr concentrations are based on an emission rate double that of the other periods. B01 = 1368 lb/hr and B02 = 1368 lb/hr, for a facility total of 2736lb/hr. This was in response to an EPA comment concerning a possible 3-hr emission limit.			

STACK ID DESCRIPTIVE INFORMATION				
STACK ID	SOURCE DESCRIPTION	DATE INSTALLED (MODIFIED)	STATUS	
	Emergency Generator No. 1	TBD	Exempted	
	Emergency Generator No. 2	TBD	Exempted	
	Fire Pump	TBD	Exempted	
B01	Boiler No. 1 – 5700 MMBtu/hr Coal fired	TBD		
B02	Boiler No. 2 – 5700 MMBtu/hr Coal fired	TBD		
CR01	Coal – Petcoke Crusher	TBD		
CR02	Limestone Crusher	TBD		
CT01A-L & CT02A-L	Cooling Towers	TBD		
MT01	Railcar Unloading	TBD		
MT02	Conveyor Transfer to Stacker/Reclaim	TBD		
MT03	Emergency Stockout drop to Pile	TBD		
MT04	Transfer Tower Conveyor	TBD		
MT05	Emergency Reclaim	TBD		
MT08	Stacker/Reclaimer Stockout	TBD		
MT09	Stacker/Reclaimer Reclaim	TBD		
MT10	Conveyor to Crusher Tower	TBD		
MT11	Conveyor to Transfer Tower	TBD		
MT14	Hopper Loading	TBD		

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MT15	Conveyor Transfer	TBD		
MT16	Fly Ash - Truck loadout 1	TBD		
MT17	Fly Ash - Truck loadout 2	TBD		
MT18	Fly Ash - Silo 1	TBD		
MT19	Fly Ash - Silo 2	TBD		
MT20	Truck Unloading To Limestone Pile	TBD		
MT21	Limestone reclaim feeder	TBD		
MT22	Limestone emergency reclaim feeder	TBD		
MT23	Limestone drop to crusher house	TBD		
MT24	Limestone emergency drop to crusher house	TBD		
MT25	Limestone crusher drop to overland conveyors	TBD		
MT26	Limestone overland conveyor drop to cross conveyor	TBD		
MT27	Limestone emergency overland conveyor drop to cross conveyor	TBD		
MT28	Limestone cross conveyor drop to Limestone Silo #1	TBD		
MT29	Limestone overland conveyor drop to Limestone Silo #2	TBD		
MT30	Limestone overland conveyor drop to Limestone Silo #3	TBD		
MT33	Lime Silo	TBD		
MT34	Gypsum Conveyor to Stockout	TBD		
MT36	Gypsum Truck loading	TBD		
MT35	Gypsum conveyor to Off-Spec Stockout	TBD		
S01 – S12	Coal Silos 1 thru 12	TBD		
SP01	Limestone Storage Pile	TBD		
SP02	Gypsum Storage Pile	TBD		
SP03	Coal Storage Pile	TBD		
SP04	Petcoke Storage Pile	TBD		
SP05	Off-Spec Gypsum Storage Pile	TBD		

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AIR DISPERSION MODELING SUMMARY SHEET Of Voluntary Additional Modeling for the Santee Cooper Pee Dee Facility Permit Number 1040-0113 December 12, 2008

This summary is an addition to the Department's standard modeling summary. It was created to include modeling not required by state regulations, but modeling that was done to provide additional information in response to comments on the Santee Cooper Pee Dee permit application.

Mercury and Sulfuric Acid Modeling

The EPA has not set national ambient air quality standards for HAP emissions. Therefore, there are no national ambient standards for mercury or sulfuric acid to use in accessing the impacts of these HAP emissions of the Pee Dee plant. South Carolina, however, has established maximum allowable ambient concentrations (MAAC) for air toxics emissions under S. C. Regulation 61-62.5, Standard No. 8 - Toxic Air Pollutants (Standard No. 8).

Under the Standard No. 8 exemption for sources that burn virgin fuels, the facility was not required to model for mercury or for sulfuric acid. However, due to concerns over HAP emissions impacts, Santee Cooper voluntarily submitted mercury and sulfuric acid air dispersion modeling. The modeling was reviewed by the Department and the results were compared to the applicable MAAC standards as shown in the tables below.

Mercury emissions were calculated from 40 CFR 60 Subpart Da emission limits. The boilers will fire predominantly bituminous coal and therefore will be limited to mercury emissions of 2.00E-05 pounds per megawatt-hour (lb/MWh). Each boiler will generate 660 MW gross and as such, the emission limit per unit will be 0.0132 pounds per hour (lb/hr) or 116 lb/yr. Note that the draft permit limit (69 lb/yr) for mercury emissions is lower than the Subpart Da limit and that the recently submitted case-by-case MACT analysis has an even lower proposed limit. However, the higher Subpart Da value was used to provide conservative results for this analysis.

Modeling was conducted following standard DHEC methodology for Class II modeling analyses. The normalized emission impacts are based on a 1 g/s emission rate for each boiler (2 g/sec total). Those impacts are then scaled by the appropriate emission rate to yield the 24-Hour Impact. In this case, the concentration was scaled by the NSPS Subpart Da emission limit of 0.0264 pounds per hour (0.0033 g/sec) for the two boilers.

The potential facility emissions were modeled for sulfuric acid.

TOXIC AIR POLLUTANTS MODELING ANALYSIS					
Pollutant	CAS Number	Normalized Concentration ($\mu\text{g}/\text{m}^3$)	24-hour Impact ($\mu\text{g}/\text{m}^3$)	Standard ($\mu\text{g}/\text{m}^3$)	% of Standard
Mercury	7439-97-6	0.16 ⁽¹⁾	0.0003	0.25	0.1
Sulfuric Acid	7664-93-9	--	0.57	10.00	5.7
1) Normalized concentration is based on 2 g/sec (or 1 g/sec from each boiler). 24-hour impact = $0.16 \mu\text{g}/\text{m}^3 / 2 * 0.0033 \text{ g/sec}$					

PM_{2.5} Modeling

PM_{2.5} is regulated under section 110 of the federal Clean Air Act [Clean Air Act § 110, and 40 CFR § 50.13] and is therefore a regulated NSR pollutant as defined in South Carolina Regulation 61-62.5 Standard 2. However, EPA did not promulgate final PM_{2.5} implementation rules until May 16, 2008. [73 FR 28321], which was after the draft PSD permit was issued (December 2007). Because of this, the Department did not have state or federal PM_{2.5} implementation rules during the review of the permit application. As a result, the approach used for assessing PM_{2.5} is discussed below.

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While current regulations do not require PM_{2.5} modeling, subsequent to issuance of the draft PSD permit, Santee Cooper and the Department have conducted ambient air quality modeling to assess the impact of the Pee Dee project on PM_{2.5} concentrations. Predicted concentrations were compared with the primary and secondary PM_{2.5} NAAQS. (The primary and secondary standards are identical. EPA has not yet issued PSD increments for PM_{2.5}, therefore, the PM_{2.5} NAAQS are the only PM_{2.5} ambient limits currently available for direct comparison with modeling results.

Year	UTMX	UTMY	Normalized	24-Hour	DHEC Standard	
	(km)	(km)	Emission Impacts (µg/m3)	Mercury Impacts (µg/m3)	No. 8 MAAC (µg/m3)	% of Standard
1987	638.063	3755.566	0.14969	2.49E-04	0.250	0.10%
1988	640.453	3755.481	0.14309	2.38E-04	0.250	0.10%
1989	640.653	3755.281	0.14141	2.35E-04	0.250	0.09%
1990	640.553	3754.781	0.15959	2.65E-04	0.250	0.11%
1991	637.753	3755.381	0.15123	2.52E-04	0.250	0.10%
MAX	640.553	3754.781	0.15959	2.65E-04	0.250	0.11%

The PM_{2.5} modeling evaluations were performed assuming that PM_{2.5} emissions from the proposed coal boilers and crushers are equal to total estimated PM₁₀ emissions including condensables. The remaining sources were modeled using available PM_{2.5} emission factors and rates. This is obviously a conservative approach and helps reduce the possibility that PM_{2.5} impacts were underestimated.

Modeling results were compared to the PM_{2.5} NAAQS which are an annual average of 15 µg/m³ and a 24-hour average of 35 µg/m³ (achieved when the 98th percentile 24-hour concentration is less than or equal to the standard). Santee Cooper reported predicted concentrations from the modeling evaluations of 0.65 µg/m³ for the annual average (highest annual average of the five modeled years), and 3.60 µg/m³ for the 24-hour average (highest three year rolling average of the 98th percentile concentrations). Santee Cooper reported total concentrations, including representative background concentrations from the Department's Winyah monitoring station, of 13.6 ug/m³ (annual) and 34.4 ug/m³ (24-hour average). The Department reviewed the modeling results submitted by Santee Cooper and reran the modeling to verify the results. The predicted PM_{2.5} concentrations obtained by the Department were 0.7 ug/m³ for the annual average (highest annual average of the five modeled years) and 5 ug/m³ for the 24-hour average (highest second high for the five modeled years, which is more conservative than the 98th percentile concentration used by Santee Cooper). Total concentrations obtained by the Department, including background concentrations from the H L Sneed Middle School monitoring station, were 13.3 ug/m³ (annual) and 34 ug/m³ (24-hour average). Both methods produced results that are below the respective PM_{2.5} NAAQS for each averaging period. [Note: Santee Cooper reviewed monitoring data from the two closest PM_{2.5} monitoring stations operated by the Department for their analysis. The H L Sneed Middle School station is the closest to the proposed facility and is more representative meteorologically, but Santee Cooper chose to use data from the Winyah station in their analysis because it is slightly more conservative for the 24-hr standard (the annual average calculated by Santee Cooper for both stations was 12.9 ug/m³). Santee Cooper did not realize, however, that the data posted on the Department's web site included data for a partial year of monitoring at the Winyah site and should not be used for modeling analyses. The Department used data from the H L Sneed Middle School site, a suburban site just outside the Florence city limits, as a conservative background for the rural Santee Pee Dee facility location. The Department used the annual three year design value for the Sneed site as the annual background concentration rather than the three-year arithmetic average used by Santee Cooper in order to match the form of the PM_{2.5} annual NAAQS. The annual design value for the Sneed site is slightly lower, at 12.6 ug/m³, than the 12.9 ug/m³ number calculated by Santee Cooper.]

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Pollutant	Averaging Time	Model Used	Maximum Modeled Concentration ($\mu\text{g}/\text{m}^3$)	Background Concentration ($\mu\text{g}/\text{m}^3$)	Total ($\mu\text{g}/\text{m}^3$)	Standard ($\mu\text{g}/\text{m}^3$)	% of Standard
PM _{2.5}	24 Hour	AERMOD	5.0 ⁽¹⁾	29.0 ⁽²⁾	34.0	35	97
	Annual	AERMOD	0.7 ⁽³⁾	12.6 ⁽²⁾	13.3	15	89
1) 24-hour averaging time is based on highest second high over each of the five years (more conservative than 98 th percentile).							
2) Based on the 2005-2007 three year design value for the Sneed site.							
3) Annual averaging time is based on highest first high.							
4) Arithmetic mean.							

PM₁₀ Additional Modeling

It is important to note some general concepts regarding the PM₁₀ increment modeling before addressing each of the concerns.

- The material handling sources (with the exception of those routed to a control device) are low-level releases from storage piles or material drop points and are modeled without a release velocity. Due to the poor dispersion characteristics of these sources, they are not well-mixed within the atmosphere, leading to higher impacts near their release location. As a result, these sources account for a majority of the modeled impacts on the highest impact days.
- Increment analyses are allowed to be based on actual emissions. In this case, however potential emission rates, not actual emissions, were modeled for all sources, yielding higher modeled impacts than would actually be expected to occur. Therefore, the increment analyses provide a conservative estimate of impacts.
- The highest impacts predicted by the model are isolated to the area immediately adjacent to the plant. The impacts drop off sharply with distance from the facility. When compared to the 24-hr increment of 91 $\mu\text{g}/\text{m}^3$, only four receptors exceed 26 $\mu\text{g}/\text{m}^3$ and only twelve receptors exceed 20 $\mu\text{g}/\text{m}^3$. The worst-case impacts for all other years are below 25.2 $\mu\text{g}/\text{m}^3$.
- The material handling sources were assumed to operate at the maximum short-term production capacity for 8,760 hours per year. This results in an overestimation of emissions for the following reasons:
 - The material handling equipment will not typically operate at its maximum production rate (i.e., the equipment capacity). The two boilers could not process the amount of material that the material handling equipment could generate at the maximum production rate over a long period of time.
 - The material handling equipment does not operate 24 hours per day and, for safety reasons, typically does not operate in the night-time hours. Although Santee Cooper cannot control when coal trains arrive, and therefore may need to unload a train at night, other material handling activities such as loading the coal silos from the coal piles will usually take place during the day. Night-time hours generally produce the highest modeled ambient impacts from low-level emission sources due to atmospheric stability at that time.
 - The generation of emissions from both storage piles and material transfer points is based on wind speed. Storage pile emissions will occur only when wind speeds exceed approximately 12 miles per hour (mph), [Kinsey, J. and Cowherd, C., "Fugitive Emissions" in Buonicore, A. and Davis, W., eds., *Air Pollution Engineering Manual*, Van Nostrand Reinhold, 1992.] but these emissions were modeled at every hour. The worst-case impacts from the storage piles occur at low wind speeds due to reduced dispersion. During these low-wind speed hours, there will be no actual emissions from storage piles, but the model conservatively predicts the highest impacts during these hours. Specifically, during the 24-hour period with the highest impact for the five-year period modeled (November 15, 1990), the wind speed never exceeded the 12 mph threshold. The average speed for that 24-hour period is 4.25 mph excluding calm hours and 3.19 mph including calm hours. The maximum wind speed during this 24-hour period is 9.17 mph. Therefore, although minimal (if any) emissions of wind-generated PM would actually be created, the modeled impacts from storage piles are still considered.

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- In addition to the storage piles, the material transfer emissions will be lower during periods of low wind speeds. However, these emissions are assumed to be the same each hour regardless of wind speed.
- No control efficiency was included for watering of the storage piles and material transfer points. The piles will be routinely watered, and emissions reductions from watering can be as high as 90%. [Kinsey, J. and Cowherd, C., "Fugitive Emissions" in Buonicore, A. and Davis, W., eds., *Air Pollution Engineering Manual*, Van Nostrand Reinhold, 1992.], [EPA AP-42, Section 13.2.4 Aggregate Handling and Storage Piles, November 2006.]
- The control efficiency for dust collectors on the material handling sources is conservatively assumed to be 99%. The control efficiency expected to be achieved in practice will likely be above 99.9%.
- Each cooling tower was modeled using the original proposed PM₁₀ emission rate of 4.66 lb/hr, based on 0.005% drift loss. The revised draft permit limit is now based on 0.0005% drift loss, resulting in a new PM₁₀ emission rate of 0.466 lb/hr for each cooling tower.

Santee Cooper conducted additional modeling using the assumption that winds were stronger than 12 mph 13.21% of the time. As shown below, the modeled 24-hr impacts would still remain below the standard of 30 µg/m³, even using all of the conservative assumptions noted above (including, in particular, the use of a value for cooling tower drift loss that is ten times higher than the revised design value).

High 2nd High 24-Hr Impact	Contribution from Storage Piles	Factor increase due to emission factor change	Revised Storage Pile Contribution	Revised Total	Class II Increment
µg/m³	µg/m³		µg/m³	µg/m³	µg/m³
27.9	4.6	1.36	6.3	29.6	30

ATTACHMENT B

Equipment Description **Santee Cooper (Pee Dee Generating Station)** **Permit No. 1040-0113-CA** **Page 1 of 4**

EMISSION UNITS		
Unit ID	Unit Description	Control Device Description
01	Boiler No. 1	Fabric Filter Baghouse, Wet Limestone FGD, Selective Catalytic Reduction
02	Boiler No. 2	Fabric Filter Baghouse, Wet Limestone FGD, Selective Catalytic Reduction
03	Material Transfer System – Coal	Baghouses or water mist dust eliminators
04	Material Transfer System – Petcoke	Baghouse or water mist dust eliminator
05	Coal / Petcoke Crusher	Baghouse or water mist dust eliminator
06	Material Transfer System - Limestone	Baghouses or water mist dust eliminators
07	Limestone Crusher	Baghouse or water mist dust eliminator
08	Material Transfer System – Gypsum	N/A
09	Material Transfer System – Fly Ash	Baghouses or water mist dust eliminators
10	Material Transfer System – Bottom Ash	N/A
11	Cooling Towers	N/A

CONTROL DEVICES			
Control Device ID	Control Device Description	Installation Date	Pollutant(s) Controlled
FF 1	Fabric Filter Baghouse	Future	PM / PM ₁₀
Scrubber 1	Wet Limestone FGD	Future	SO ₂
SCR 1	Selective Catalytic Reduction	Future	NO _x
FF 2	Fabric Filter Baghouse	Future	PM / PM ₁₀
Scrubber 2	Wet Limestone FGD	Future	SO ₂
SCR 2	Selective Catalytic Reduction	Future	NO _x
BH01 or WMDE01	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH02 or WMDE02	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH03 or WMDE03	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH04 or WMDE04	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH05 or WMDE05	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH06 or WMDE06	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH07 or WMDE07	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH08 or WMDE08	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH09 or WMDE09	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH10 or WMDE10	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH11 or WMDE11	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH12 or WMDE12	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH13 or WMDE13	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH14 or WMDE14	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BVF01	Bin Vent Filter	Future	PM / PM ₁₀
BVF02	Bin Vent Filter	Future	PM / PM ₁₀
BVF03	Bin Vent Filter	Future	PM / PM ₁₀
BH15 or WMDE15	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH16 or WMDE16	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀

ATTACHMENT B

Equipment Description Santee Cooper (Pee Dee Generating Station) Permit No. 1040-0113-CA Page 2 of 4

CONTROL DEVICES			
Control Device ID	Control Device Description	Installation Date	Pollutant(s) Controlled
BH17 or WMDE17	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH18 or WMDE18	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH19 or WMDE19	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀
BH20 or WMDE20	Baghouse or water mist dust eliminator	Future	PM / PM ₁₀

UNIT ID 01 – Boiler No. 1				
Equip ID	Equipment Description	Installation Date	Control Device ID	Stack ID
B01	5700 x 10 ⁶ Btu/hr maximum rated heat input (660 MW nominal rated output) Boiler	Future	Fabric Filter Baghouse, Wet Limestone FGD, Selective Catalytic Reduction	S01

UNIT ID 02 – Boiler No. 2				
Equip ID	Equipment Description	Installation Date	Control Device ID	Stack ID
B01	5700 x 10 ⁶ Btu/hr maximum rated heat input (660 MW nominal rated output) Boiler	Future	Fabric Filter Baghouse, Wet Limestone FGD, Selective Catalytic Reduction	S02

UNIT ID 03 – Material Transfer System – Coal				
Equip ID	Equipment Description	Installation Date	Control Device ID	Stack ID
MT01	Railcar Shaker	Future	BH01 or WMDC01	MT01
MT02	Conveyor Transfer to Stacker/Reclaimer	Future	BH02 or WMDC02	C3A
MT03	Emergency Stockout Drop to Pile	Future	N/A	C3B
SP03	Coal Storage Pile	Future	N/A	Fugitive
MT04	Transfer Tower Conveyors	Future	BH03 or WMDC03	C2
MT05	Emergency Reclaim	Future	BH04 or WMDC04	RP
MT08	Stacker/Reclaimer Stockout	Future	N/A	Fugitive
MT09	Stacker/Reclaimer Reclaim	Future	N/A	Fugitive
MT10	Conveyor to Crusher Tower	Future	BH05 or WMDC05	C3A, C4B
MT11	Conveyor to Transfer Tower	Future	BH06 or WMDC06	C5A, C5B
MT12	Conveyor to Bunkers	Future	BH07 or WMDC07	C6A, C6B
S01-S06	Bunker 1 Silos (6)	Future	BH08 or WMDC08	S01-S06
S07-S12	Bunker 2 Silos (6)	Future	BH09 or WMDC09	S07-S12

UNIT ID 04 – Material Transfer System – Petcoke				
Equip ID	Equipment Description	Installation Date	Control Device ID	Stack ID
SP04	Petcoke Storage Pile	Future	N/A	Fugitive
MT14	Petcoke Reclaim Feeder	Future	N/A	Fugitive
MT15	Conveyor Transfer	Future	BH10 or WMDC10	C4A

ATTACHMENT B

Equipment Description Santee Cooper (Pee Dee Generating Station) Permit No. 1040-0113-CA Page 3 of 4

UNIT ID 05 – Coal/Petcoke Crusher				
Equip ID	Equipment Description	Installation Date	Control Device ID	Stack ID
CR01	900 tons/hr Crusher	Future	BH11 or WMDC11	CR01

UNIT ID 06 – Material Transfer System – Limestone				
Equip ID	Equipment Description	Installation Date	Control Device ID	Stack ID
MT20	Truck unloading to limestone pile	Future	N/A	Fugitive
SP01	Limestone Storage Pile	Future	N/A	Fugitive
MT21	Emergency limestone reclaim hopper loading	Future	N/A	Fugitive
MT22	Emergency limestone reclaim feeder	Future	N/A	Fugitive
MT23	Limestone drop to crusher house	Future	BH12 or WMDC12	MT23
MT24	Emergency limestone drop to crusher house	Future	BH13 or WMDC13	MT24
MT25	Limestone crusher drop to overland conveyors	Future	BH14 or WMDC14	MT25
MT26	Limestone overland conveyor drop to cross conveyor	Future	N/A	Fugitive
MT27	Emergency limestone overland conveyor drop to cross conveyor	Future	N/A	Fugitive
MT28	Limestone cross conveyor drop to limestone Silo #1	Future	BVF01	MT28
MT29	Limestone overland conveyor drop to limestone Silo #2	Future	BVF02	MT29
MT30	Limestone overland conveyor drop to limestone Silo #3	Future	BVF03	MT30

UNIT ID 07 – Limestone Crusher				
Equip ID	Equipment Description	Installation Date	Control Device ID	Stack ID
CR02	125 tons/hr Crusher	Future	BH15 or WMDC15	CR02

UNIT ID 08 – Material Transfer System – Gypsum				
Equip ID	Equipment Description	Installation Date	Control Device ID	Stack ID
MT34	Conveyor to stockout	Future	N/A	Fugitive
MT35	Conveyor to off-spec stockout	Future	N/A	Fugitive
SP02	Gypsum storage pile	Future	N/A	Fugitive
SP05	Off-spec gypsum storage pile	Future	N/A	Fugitive
MT36	Truck loading	Future	N/A	Fugitive

UNIT ID 09 – Material Transfer System – Fly Ash				
Equip ID	Equipment Description	Installation Date	Control Device ID	Stack ID
MT16	Truck loadout 1	Future	BH16 or WMDC16	MT16
MT17	Truck loadout 2	Future	BH17 or WMDC17	MT17
MT31	Wet fly ash truck loadout 1	Future	N/A	Fugitive
MT32	Wet fly ash truck loadout 2	Future	N/A	Fugitive
MT18	Silo 1	Future	BH18 or WMDC18	MT18

ATTACHMENT B

Equipment Description
Santee Cooper (Pee Dee Generating Station)
Permit No. 1040-0113-CA
Page 4 of 4

UNIT ID 09 – Material Transfer System – Fly Ash				
Equip ID	Equipment Description	Installation Date	Control Device ID	Stack ID
MT19	Silo 2	Future	BH19 or WMDC19	MT19
MT33	Lime Silo	Future	BH20 or WMDC20	MT33

UNIT ID 10 – Material Transfer System – Bottom Ash				
Equip ID	Equipment Description	Installation Date	Control Device ID	Stack ID
MT37	Bottom ash transfer point	Future	N/A	Fugitive

UNIT ID 11 – Cooling Towers				
Equip ID	Equipment Description	Installation Date	Control Device ID	Stack ID
CT01	287,100 gpm Cooling Tower 1	Future	N/A	Fugitive
CT02	287,100 gpm Cooling Tower 2	Future	N/A	Fugitive

BOARD:
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Promoting and protecting the health of the public and the environment

BOARD:
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M. David Mitchell, MD
Glenn A. McCall
Coleman F. Buckhouse, MD

December 16, 2008

Certified Mail
91 7108 2133 3934 4680 6231

Mr. Jay Hudson
Santee Cooper – Pee Dee Generating Station
One Riverwood Drive
Moncks Corner, SC 29461-2901

ATTENTION: Jay Hudson

Dear Mr. Hudson:

Your permit application has been reviewed by our technical staff. Enclosed is Construction Permit No. 1040-0113-CA. Please note the conditions on this permit by reading it carefully. Pursuant to the South Carolina Administrative Procedures Act, this construction permit may be appealed in accordance with applicable state law. Please see the enclosed Notice of Appeal Procedure, effective July 1, 2006, for guidelines on appeal submittals.

In addition to this permit to construct, a permit to operate is required in accordance with the Air Pollution Control Regulations and Standards for the State of South Carolina. The regulations require a written request for a new or revised operating permit to cover any new, or altered source, postmarked no later than fifteen (15) days after the actual date of initial startup of each new or altered source unless a more stringent time frame is required.

Please examine this new permit carefully for errors or omissions and notify the appropriate staff member, Joe Eller, at (803) 898-3831, or by e-mail at: ellerjc@dhec.sc.gov, promptly, if any are discovered.

Sincerely,

Elizabeth J. Basil, Director
Engineering Services Division
Bureau of Air Quality

EJB:JCE:kal

Enclosure

cc: Buck Graham, Region 4, Florence EQC Office
Trinity Consultants
Permit File: 1040-0113
Main File: 1040-0113

Notice of Appeal Procedure

The following procedures are in effect beginning July 1, 2006, pursuant to 2006 Act No. 387:

1. This decision of the S.C. Department of Health and Environmental Control (Department) becomes the final agency decision 15 days after notice of the decision has been mailed to the applicant or respondent, unless a written request for final review is filed with the Department by the applicant, permittee, licensee, or affected person.
2. An applicant, permittee, licensee, or affected person who wishes to appeal this decision must file a written request for final review with the Clerk of the Board at the following address or by facsimile at 803-898-3393.

Clerk of the Board
SC DHEC
2600 Bull Street
Columbia, SC 29201

3. The request for final review should include the following:
 - a. the grounds on which the Department's decision is challenged and the specific changes sought in the decision
 - b. a statement of any significant issues or factors the Board should consider in deciding how to handle the matter
 - c. a copy of the Department's decision or action under review
4. In order to be timely, a request for final review must be received by the Clerk of the Board within 15 days after notice of the decision has been mailed to the applicant or respondent. If the 15th day occurs on a weekend or State holiday, the request is due to be received by the Clerk of the Board on the next working day. The request for final review must be received by the Clerk of the Board by 5:00 p.m. on the date it is due.
5. If a timely request for final review is filed with the Clerk of the Board, the Clerk will provide additional information regarding procedures.
6. The Board of Health and Environmental Control has 60 days from the date of receipt of a request for final review to conduct a final review conference. The conference may be conducted by the Board, its designee, or a committee of three members of the Board appointed by the chair.
7. If a final review conference is not conducted within 60 days, the Department decision becomes the final agency decision, and a party may request a contested case hearing before the Administrative Law Court within 30 days after the deadline for the final review conference.

The above information is provided as a courtesy; parties are responsible for complying with all applicable legal requirements.